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ESSAYS ON
INDIAN ECONOMIC PROBLEMS

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INDIAN ECONOMIC PROBLEMS

ESSAYS ON INDIAN ECONOMIC PROBLEMS

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PREFACE

The present volume includes some of the essays on Indian economic problems which I published in book form in 1919 and three papers on Indian prices, Indian currency and exchange in 1920 and the development of Indian industries which I wrote for the *Weltwirtschaftliches Archiv* of Kiel. I am much indebted to the Editor of the *Weltwirtschaftliches Archiv* for permission, very cordially given to me, to use these papers for the purposes of this book. The papers on "Protection for India" and "An export duty on wheat" are largely based on a statement on the Indian tariff problem which I submitted to the Fiscal Commission.

I wish to take this opportunity for thanking Mr. Manohar Lal, my old teacher, from whom I have received much encouragement and guidance in my studies. He read the entire manuscript of this book and criticised it, and at his instance I recast several passages. My thanks are also due to my brother, L. Raj Narain, who has assisted in

the collection of material and in preparing the manuscript for the press. To my friends, Professors Chiranjiva Lal and Bhupal Singh, my indebtedness is of a special kind and cannot be adequately expressed in words. They have helped me constantly in my work and both the form and the substance of the present volume owe much to them.

MacLagan Road,
Lahore,
1st October, 1922 } BRIJ NARAIN

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INDIAN WEIGHTS AND MEASURES WITH THEIR BRITISH AND METRICAL EQUIVALENTS.

A secca tola = '99814 standard tola = 3743 oz.
troy ('4107 oz. avoirdupois).

A standard tola = '4114 oz. avoirdupois = 11.664 grammes.

16 chittacks or 80 tolas = 1 (standard) sei = 2.057 lbs = 933 kilogrammes.

40 (standard) sers = 1 (standard or bazar) maund = 82.286 lbs = 37.325 kilos.

A factory pucca ser = 1.80 lbs. = .844 kilos = 72½ tolas approximately.

A factory maund = 74.67 lbs. = 33.87 kilos = 36½ (standard) ser.

A maund of wool = 82 lbs. = 37.195 kilos = 1 (standard) maund.

A bale of jute contains 400 lbs = 181.44 kilos = 5 maund.

INDIAN MONEY.

8 pies = 1 pice.

12 pies = 1 anna (= 4 pice).

16 annas = 1 rupee.

15 rupees (pre-war) = 1 sovereign.

Application OF THE Principles of Economics to Indian Conditions

ECONOMICS is a Western science in the sense that it has been developed by Western thinkers. It is, however, sometimes said that it is a Western science in another sense also—that it is the science of Western industrialism, or of business as it is done in the manufacturing countries of the West, and that its principles do not apply to an agricultural country like India. Those who uphold this view point out, in the first place, that Economics is based upon certain hypothetical assumptions which are not true in the case of India, and in the second place, that the economic conditions of India are widely different from those of European countries. The question whether the principles of Economics apply to India is important, for if it can be shown that they are inapplicable to our conditions, there would be very little use in teaching such an Economics to our students, and it would be necessary to evolve a distinctively Indian Political Economy or Economics.

In his essay on "Indian Political Economy," which he wrote in 1892, Justice Karade criticizes the hypothetical character of Political Economy.

Political Economy, he says, assumes man to be wholly absorbed in the pursuit of wealth and to be guided by self-interest in all that he does ; it assumes that the good of the society is best promoted by the free pursuit by each individual of his own gain ; that the individual is the best judge of his own interests , that all governmental interference is necessarily harmful and that labour and capital are perfectly mobile These assumptions, Ranade argues, are not true of any country, and in a country like India, "they are chiefly conspicuous by their absence." In the following oft-quoted passage he describes the conditions which determine our economic activity —

"The family and the caste are more powerful than the individual in determining his position in life Self interest in the shape of the desire of wealth is not absent but it is not the only nor principal motor The pursuit of wealth is not the only ideal aimed at. There is neither the desire nor the aptitude for free and unlimited competition except within certain predetermined grooves or groups Custom and state regulation are far more powerful than competition, and status more decisive in its influence than contract. Neither capital nor labour is mobile and enterprising and intelligent enough to shift from place to place Wages and profits are fixed and not elastic and responsive to change of circumstances. Population follows its own law, being cut down by disease and famine, while production is almost stationary, the bumper harvest of one year being needed to provide against the uncertainties of

alternate bad seasons. In a society so constituted, the tendencies assumed as axiomatic are not only inoperative but are actually deflected from their proper direction. You might as well talk of the tendency of mountains to be washed away into the sea, or of the valleys to fill up, or of the sun to get cold, as reasons for our practical conduct within a measurable distance of time."

If the Political Economy which is taught in our colleges to-day is the same Political Economy which Ranade criticized a quarter of a century ago, and if the India of to-day is the same India which Ranade has described so well in the passage quoted above, then it may be said without any hesitation that the principles of Economics do not apply to India and that we want an Economics of our own. But, as a matter of fact, both Political Economy and our country have much changed since 1892.

The reaction against the old Political Economy began long before 1892, and Ranade in his essay refers to it. Bagehot showed that some of the assumptions of that Political Economy were true in the case of England, but of few other countries. Cliffe Leslie denied that labour and capital moved freely from one trade to another even in a country like England. He admitted that the migration of labour and capital in the home trade and international trade has some effect on wages and profits, but he considered this effect in both cases to be "uncertain irregular, and incalculable." He denied that

there was an equalization of wages and profits in the home trade which the economists of his time took for granted. He also denied that the desire for wealth was the only motive to wealth production. His general conclusion was that the economic conditions of a country which determined the production, distribution and consumption of wealth were "the result of a long evolution in which there has been both continuity and change and of which the economical side is only a particular aspect or phase." For a proper study of the economic problems of a country the study of history and of the general laws of society is thus essential.

Cliffe Leslie belonged to the historical school which has done so much to make political economy less hypothetical and more practical. Economics also owes much to socialistic criticism of the existing individualistic system of production and distribution. It is now generally recognized that the individual is not the best judge of his own interests in all cases and that governmental interference is not necessarily an evil. The state interferes frequently on behalf of the worker, and with the full approval of the exponents of Political Economy. The "economist" who cared for wealth and nothing else, and who always knew what was best for him, has disappeared from the text books of Economics. Economists today "deal with man as he is," not with an "economic man," that is, with a man of flesh and blood, with all his vanities, affections, and imperfections. The change in the character of Polit-

cal Economy is of great significance for us. It means that the principles of the science are less inapplicable to Indian conditions now than they were a quarter of a century ago. So long as Economics was based upon the conception of the "economic man," it was easy for any one in India to say, "India does not want this Political Economy. There are no economic men in India." But our attitude to a science which professes to be "a study of mankind in the ordinary business of life" must be different, unless, of course, we have reasons for thinking that human nature in India is differently constituted from human nature in the West.

We may now briefly describe the change which has come over India during the last twenty-five years. India is passing through a period of transition, economic as well as political. Our political progress during recent years has been much more rapid than economic, but the latter, perhaps, is of greater importance. The railways have broken down the isolation of the Indian village and the Indian village community has lost its self-sufficing character. Agriculture still remains the chief occupation of the people but the number and importance of manufacturing industries is increasing. The progress of India in commerce and industry is reviewed in subsequent chapters.

"Wages and profits" wrote Ranade "are fixed, and not elastic and responsive to change of circumstances." It may be doubted whether

wages, and particularly profits, were absolutely fixed in Banade's time; at the present time neither wages nor profits are fixed. Since 1892 prices of all articles have risen enormously in all parts of the country, with prices, wages, urban as well as rural, have risen, though more slowly. The rise in wages, except under exceptional circumstances favouring the wage-earner, is, as a rule, less rapid than that in prices. The increase in the profits of agriculture has been enormous. The great and general rise of prices and wages in India shows that the influence of custom as a determining factor in economic matters is declining. Our prices and wages are now for the most part competitive, not customary. Customary prices and wages remain unchanged over long periods of time—that is no longer the case with wages and prices in India. Thanks to the increase in the facilities of communication and transportation, the mobility of labour and capital has increased. Cash payments have taken the place of payments in kind in villages. For example, the Punjab Wages Census of 1917 showed that purely grain wages were paid in only one per cent. of the reporting villages. The development of the railway system, the increased use of money, and the spread of education, have all tended to break up the influence of custom.

As regards the influence of custom on wages Mr. Bannerjee says —

“Custom was the chief regulator of wages in India till the middle of the last century. Now-a-

days, however, they are governed more by competition than by custom, but still they are not so elastic and responsive to changes of circumstances as in Europe or America. The fluctuations in the rates of wages are slight—the deviations from the usual wages levels of any particular locality are always confined within narrow limits. In the towns, owing to the ever increasing demand for labour, competition has now established itself as the determining factor in wages, but in the country, especially in the remote villages, custom continues to govern the earnings of labour to a large extent. The economic theory that wages depend on demand and supply of labour is as true in India as elsewhere, but the law finds here a limited scope for its operation." *

The reports of the Wages Surveys taken in 1911 and 1916 (in the Punjab in 1912 and 1917), however, show that the fluctuations in the rates of wages are not slight but considerable. Custom, for the most part, has ceased to govern the earnings of labour, whether in the town or in the country. The law of supply and demand, the reports of the Wages Surveys show, has plenty of scope for its operation in India.

For a long time our rents were customary and invariable. The existence of customary rents in an agricultural country where the people live in small isolated, self-dependent village communities is natural. But our customary rents, under the influence of changing economic conditions,

* A Study of Indian Economies, p. 69

gradually became competitive. Mr. Baden Powell says.—

“ But some years ago, the rents were still very much customary rents, i.e., they did not represent anything like a competition rental value of the soil. As however time went on, this feature began to disappear, land came to be more in demand for a largely increasing population; the rents paid gradually became more and more proportionate to the real value and advantage of different soils in different situations.” *

Competition for land and with it the rents, in fact, increased to such an extent that the Government had to interfere on behalf of the poor tenants. The object of the tenancy laws is to limit the operation of the law of supply and demand in regard to land.

The applicability of the Ricardian doctrine of rent to Indian conditions has been questioned and it is asserted that rent forms part of prices in India. The Ricardian doctrine of rent is very simple. Briefly, the rent of any land, according to Ricardo, is a surplus above costs of cultivation on the marginal land—it measures the differential advantages which the land in question enjoys over the worst land contributing to the supply at the time. It is difficult to understand how this doctrine does not apply in the case of India. All lands in India are not of the same degree of fertility and all are not equally desirable from the situational point of view. It follows that the yield

* Land Revenue in British India, p 180.

of some lands must be greater than that of others. If the yield of an acre of land A is greater than that of B, taking both situation and fertility into account, and the difference between the yield of A and B is 50 maunds, then 50 maunds will be the rent of A, supposing B to be the marginal land which, in view of the demand for the produce of land, it is just worth while to cultivate. Now it is a matter of indifference whether this 50 maunds is retained by the cultivating tenant of A, or whether any portion of it, or the whole of it, is taken away by the landlord or the Government. The 50 maunds is the rent of A, in whatever manner it be shared between the tenant and the landlord, or between the tenant, the landlord and the Government. How is the Ricardian law of rent inapplicable here? If competition among the tenants is keen, the whole of the rent may be appropriated by the private landlord, or if the tenant holds land directly from the State, the exacting State landlord may demand the 50 maunds as rent. In India the Government has by law limited the amount of rent which private landlords can demand from their tenants. Suppose the landlord cannot take more than 30 maunds out of the surplus; the remaining 20 maunds of the surplus will be retained by the tenant. The 30 maunds which the landlord has received may be now divided in any proportion between the landlord and the Government.

Custom cannot abolish rent; it only affects the division of it between the tenant and the landlord. Rent would still exist even if com-

petition among the tenants were wholly non-existent. The only difference between customary and competitive rents is that, in the one case, the greater portion of the income from the land is retained by the cultivators, while in the other, it goes into the pockets of the landlord. The amount of the income derived from any piece of land must depend, whether rents are customary or competitive, upon the differential advantages in production which it enjoys over the worst lands in cultivation at the same time. Further, whether rents are paid by the tenants in kind or in money, does not affect the main principle.

Professor Gilbert Slater of the University of Madras published in 1918 the first volume of an extremely interesting study of the economic conditions of some South Indian villages. The investigations, in most cases, were made by Indians under the direction of Professor Slater. Among other things we learn that the amount of rent paid for land in these villages depends upon the nature of the land. In the village Dusi in the North Arcot district, we are told, the rents paid by the tenants are always in kind. When the landlord supplies everything and the tenant supplies labour only, the landlord takes five-sixths of the produce. When the tenant supplies everything and cultivates the land at his own cost, the landlord takes less. What is important for our purposes is the fact that "the amount of rent varies according to the fertility of the land." In Palak Kunchi village in the Tanjore district, "Rent is invariably paid in kind, the

rate varying according to fertility, facility of irrigation and convenience." In the Thettupalli village in the Chittoor district the rent for the dry land is Rs. 1-5-2 and for the wet land Rs. 2-11-0 per acre.

Again, it is difficult to see why rents founded on custom should form part of the price of agricultural produce while competitive rents do not. If rent is a surplus above cost, it cannot affect price, whether the amount of rent is fixed by custom or competition.

In the view of Justice Ranade also rent forms part of price in India—not, however, because our rents are founded on custom. He says.—

"The Ricardian theory that economic rent does not enter as an element of price, admittedly does not apply when all occupied land has to pay monopoly rent to the state landlord. There is no competition among landlords in this country, for there is only one true landlord, and the so-called land-tax is not a tax on rents proper, but frequently encroaches upon the profits and wages of the poor peasant, who has to submit perforce to a loss of status and accommodates himself to a lower standard of life as pressure increases."

It may be questioned whether the State in India is the universal landlord. As Mr. Baden Powell says, the State is the immediate owner of particular lands, and of all waste and unoccupied land. But as regards cultivated land in villages and estates, the State is not the owner—"the

utmost it does is to regard the land as hypothecated to itself as security (in the last resort) for the land revenue assessed on it."* Mr. Baden Powell's view is that the land revenue may be regarded as a tax on agricultural incomes. Where the State receives the land revenue directly from the cultivator, the tax according to the official view, does not exceed 50 per cent. of the "net assets" of the estate, which are defined as "the average surplus which the estate may yield after deduction of the expenses of cultivation including profits of stock and wages of labour." Where the State deals with the cultivator through a landlord, it takes about half of the rent received by him. If we accept the official view as to the incidence of land revenue on rent as correct, then the amount taken by the State is merely a certain portion of the surplus produce of the land, and the tax does not encroach upon the profits and wages of the cultivator. If the official view is incorrect, then it only means that the State takes more than the surplus, and the price of corn must rise. The Ricardian law of rent does not say that if a tax is imposed upon the rent of land which exceeds the amount of the economic rent and encroaches upon the normal profits of the cultivator, the price of corn will not be affected. The Ricardian theory of rent is concerned simply with the surplus above cost, and if it is a true surplus, a tax of even 100 per cent. on it would not, directly, affect price.

* Land Revenue in British India, p. 49

It can, however, be argued that if there were no tax, the cultivator would have some surplus money, which he might invest in agricultural machinery or in improving his land. The supply of corn may thus increase and its price fall. The remission of the heavy tax on agricultural incomes may, indirectly, affect the price of corn, provided the landlords make use of the revenue relinquished by the State to increase the productivity of the land.

Another theory which is said to be inapplicable to Indian conditions is the Ricardian theory of value. As regards the effect of increased cost of production on prices in India Mr. Datta of the Prices Enquiry Committee says —

" It is true that just as a rise of prices leads to a rise in the cost of cultivation, so does a rise in cost of cultivation in its turn, ordinarily react on the price level and cause it to rise. The circumstances of India are however exceptional in this matter. The Indian cultivator is generally uneducated and incapable of forming any estimate of his cost of cultivation. Himself and the whole of his family are generally employed either on the field or in tending his cattle, and he hardly ever realizes what he would have to pay if he had to employ hired labour for his work. He is content so long as his fields and his cattle bring him the bare means of subsistence and enable him to pay the rent of his lands. His lands have a special interest to him, and when he finds that the yield of his fields is not sufficient, he does not hesitate to run into debt to provide

himself with his necessities, the most important of which are the means of cultivating his lands, to which he sticks as long as he is not compelled by his creditors to part with them. Thus, in India, it is not the producer who fixes the price of his produce after calculating the cost of production, but it is the competition among the purchasers, or, in other words, the demand which regulates the price. The cost of cultivation has not, therefore, much influence on prices in India."**

Dr. Marshall has compared the effect of utility and cost of production on value to the action of the blades of a pair of scissors in cutting a piece of paper. Both the blades are wanted for cutting, the scissors, would not cut if it consisted of only one blade. True, the upper or the lower blade may be held still while the cutting is effected by moving the other, but both the blades must be there. Mr. Datta's view that the Indian cultivator is incapable of forming any estimate of his costs of production, and that prices in India are regulated by demand, means that the cost of production blade of our pair of scissors is practically useless. But I very much doubt whether the Indian cultivator, though illiterate, is as ignorant as Mr. Datta imagines. He does not, as a rule keep accounts, but in most cases he knows approximately what the expenses and profits of cultivation will be. He knows which crops are more profitable and which less. In some parts

* Report on the Enquiry into the Rise of Prices in India, pp. 77-78.

of the country there has been some substitution of non-food crops for food crops. How can a farmer decide to grow cotton instead of wheat if he is incapable of forming any estimate of the costs and profits of cultivation in the two cases? Professor Slater's "Economic Studies" referred to above, throws some light on this point. One of the subjects of investigation was the cost of cultivation per acre of wet, dry and garden land. The book gives many estimates of costs and profits of cultivation; in some cases these estimates were obtained from villagers. "I was able to get the actual cultivation account of a person who owned 1.82 acres of the best land in the village (Gopala-samudran—Tinnevelly district) which was worth Rs. 6,325",* says Mr. K. Rama Chandram. The estimates of the costs and profits of cultivation in the Gangai Kondan village were obtained from the villagers; a cultivating landowner—a Brahman—was able to give an account of the cost of cultivation of his three-acre farm. Mr. K. S. Narayan Murti gives an account of the expenditure for ten acres of an average ryot, obtained from four ryots of the village Vunagatla in the Kistna district. Many other such instances could also be given. It would be queer indeed if our cultivating farmers did not know anything about costs and profits of cultivation. The very fact that they substitute one crop for another, according as some prices rise and others fall, shows that they are not so simple as we may be disposed to regard them.

Cost of production influences price by limiting supply. If price is greater than cost, supply increases, if it tends to fall below cost, supply contracts. Every one knows that with the increase in the external and internal demand for food and other raw produce, and the consequent rise of prices, the area under cultivation has increased. Inferior lands have been brought under cultivation, and the yield of these inferior lands has, to some extent, lowered the average yield of land per acre. Again, while discussing the probable effects of the imposition of an export duty on food grains, Mr. Datta says that if prices fell it would no longer be profitable to cultivate the inferior lands which would then soon go out of cultivation and there would be a permanent decrease in the produce of food grains in India, and in consequence a rise in the prices **. If the area under food grains increases or decreases according as the profits of cultivation increase or decrease, how can it be said that cost of cultivation has not much influence upon prices in India? The profits of cultivation depend upon the difference between market prices and costs. A rise in the costs of cultivation diminishes profits in the same way as a fall of prices. The higher the costs the lower is the profit, price remaining the same. If costs of cultivation rise owing to the scarcity of labour and plough cattle, unless price rises, it will become unprofitable to cultivate some lands. Mr. Datta admits that if the prices of food grains fell on account of the imposition of an

*Report on the Enquiry into the Rise of Prices in India, p. 98

export duty, the supply of food grains would decrease. But it cannot decrease if our farmers are incapable of forming any estimate of cost of production and if they would go on cultivating their lands as before whether price was greater or less than cost.

There is also an indirect relation between the cost of production of one food grain and the price of another. If for example the cost of production of wheat per acre, as compared with the price of wheat, is low, while the cost of production of, say, barley, as compared with its price, is higher the area under wheat will tend to increase at the expense of that under barley. The shortage in the supply of barley as compared with the demand, will cause its price to rise.

It must however be admitted that our inter-provincial trade seems to conform more to the law of comparative costs than to that of cost of production. The tendency to substitute non food crops for food crops implies that in each province there is some competition between the different branches of agriculture and that they do not form water tight compartments. The mobility of capital and particularly of labour, however, between the different provinces seems to be small, though statistical material for a proper scientific study of the question does not exist. India is a large country inhabited by different peoples, speaking different languages professing different faiths and differing from one another in many other respects. It is not surprising that the mobility of capital and labour between the different

provinces is small. Even in a country like England it would be wrong to assume that capital and labour move easily and quickly from one trade to another. We have also to remember that according to an English authority on the subject, trade between England and Ireland is "rather international than national, even though some important features of 'foreign trade' are absent."* Similarly the different provinces of India may be regarded as so many different 'nations' in the economic sense of the term; the trade between them is international rather than national.

The term 'Indian Economics' has come into general use in India but the connotation of the term is vague and indefinite. It is very often said that the principles of Economics are "absolutely inapplicable" to Indian conditions, and a demand is made for an "Indian Economics" whose principles would apply to India. The demand, as we have seen, is partly due to a misconception of the true character of present day Economics. There is only one science of Economics and it is based on the fact that human nature everywhere exhibits the same characteristics and that the chief impulses which lead to production, consumption, exchange and distribution of wealth are the same in all countries. It is, of course, not implied here that a tariff policy, or a tax system, or currency arrangements which are best adapted to the needs of one country, must necessarily be the most suitable for another country. It is also not suggested that there are

* Ba table's International Trade, p. 11

no differences in the economic organisation of various countries. As a matter of fact, such differences may be found to exist in different parts of the same country, Bombay and the Punjab, for example. The claim, however, for a separate Economics for each country would only be justified if it could be shown that the analysis of economic motives and the formulation of economic uniformities, which make up the science of Economics, possess only a local, not a universal value.

Again, it is sometimes said that opinion in India on such questions as the nature of land revenue, fiscal policy, currency reform, attitude of the State to industries, is sharply divided, the non official view being generally opposed to the official view, and that "the trend of economic thought in India is slowly hardening into a school." In this sense Economics in India may be divided into an "Official Economics" and a "Non official Economics." But so far as the present writer is aware, no claim has ever been made by official writers that they form any kind of "school," and as for the "Non official school of Economics," it comprises many different, and sometimes mutually contradictory opinions upon many different economic problems of India. In this sense it would be more correct to speak, not of one but about a dozen "schools" of Indian Economics.

collecting facts relating to Indian economic life. One of the most interesting books dealing with Indian economic life is Professor Slater's "Economic Studies". Studies of this kind show how the laws of Economics work in India. It should not be supposed that they will, some day, become the basis of a new science of Economics, their chief value consists in explaining and illustrating the operation of economic laws in India. "Indian Economics" thus means a mass of statistical and other material which would be of invaluable help in the solution of Indian economic problems. It does not mean a science with peculiar laws or principles, or any proposed solutions of Indian economic problems, or any new method or methods of dealing with them

Indian *versus* Western Industrialism

It has been explained that India is slowly changing. The industrial India of to-day is not the same as the India of Ranade's time ; as compared with the state of things 50 or 60 years ago, the change would appear to be still more remarkable. The economic transformation of India has begun. Labour and capital are concentrating in factories, competition between steam power and hand power is increasing. The conditions of life and work in some of our large towns already resemble those of the industrial towns of the West. Industrialism has also brought in its train industrial disputes. Its good as well as evil effects are beginning to be felt. As yet, however, the economic revolution has affected only a small portion of the industrial field. Agriculture, ~~and~~ great industry, remains unaffected. Most manufacturing industries use hand power ; the ~~weaver~~ ^{weaver} is flourishing. But what is to be India's industrial goal ? Will it be capitalistic farming and capitalistic industry as in the West ? If so, would the change be for the better ? Or shall we, for a long time to come, remain, as we are now, a pre-

organization and social environment, together with the moral qualities on which they are based, are fundamentally different from those of the West. The more important points of contrast between Indian and Western industrialism, as indicated by Professor Mukerjee, are given below.

1. "The Western people's attitude towards the satisfaction of wants is different. They believe in the multiplication of wants. A higher social position in the West implies a higher grade of comfort, luxuries and conventional needs. To the Indian, on the other hand, there is only one plane of living, one standard of consumption in theory. In India, comfort, and not luxury, is sought for, and the ideal of comfort is the same for all classes in society. The same ideal of plain living and high thinking dominates all. The respect for man as man, and for the ideal of self-denial as the means for the realization of God in man, the two striking characteristics of the Indian outlook of life, have their influence on the system of industry."* Again,

"India can never wholly lose her discipline of the limitation of wants and the concentration of activities for the development of the soul. To India, the mystery and grandeur of the limitless vistas of the development of the soul are far more inspiring and fascinating than the mastery over external physical nature."†

2. The Indian economic organization is based on land, and the land basis is 'eupsychic.'

*Ibid p 324

†Ibid p 458

Agriculture "is a school of the virtues of sobriety, forethought and mutual helpfulness. Success in agriculture implies only the exploitation of nature. Urban economic prosperity, on the other hand, is based on the exploitation of man. Rural economy prevents the waste of friction due to the conflicts of interest among individuals and groups, and brings about social harmony in industry. The land as the basal factor of economic life is the best insurance against class warfare and the consequent economic instability due to the irregular and inequitable distribution of income. That is endemic." *

In the Indian industrial world there are no disputes, strikes or lock-outs, because here man is not engaged in exploiting man. "The middleman, the trader or the money-lender in their dealings with the craftsman are always straightforward. They do not exploit the labourer but maintain him. The craftsman looks towards them with due reverence. Indeed all the relationships which are entered into in the industrial world, e.g., between debtor and creditor, employer and employed, master, artisan and apprentice, artisan and trader, landlord and tenant, and their respective duties and obligations, call for a perpetual exercise of the social virtues and humanities." †

3. "In the West," says Professor Mukerjee, "the problem of distribution is subordinated to the problem of the production of wealth." In

**Ibid* p 327

†*Ibid* p 435

India it is otherwise. "India is much more busy with the problem of the distribution of wealth than with the problem of production. What wealth she produces she attempts to distribute equitably amongst all classes of society, and this is the object which her socio-economic institutions like the joint family and caste, her system of land tenure and law of inheritance, her social and ethical ideals, seek to achieve" *

Western industrialism being unsuited to Indian conditions, India will follow her own line of economic evolution. There will be no concentration of labour and capital in a few large cities as in the West. Industries will be carried on in villages as well as in towns. Cottage industries will be strengthened and further developed. Manufacture will be combined with agriculture. The small peasant proprietor will not disappear; he will, on the contrary, find his position improved. In the ideal state of things each family in the village will be more or less self-supporting. Each will have a small plot of land and two or three looms driven by motor or electric power. That is how Professor Mukerjee proposes to combine agriculture with cottage industries.

Professor Mukerjee's description of Indian industrialism is more or less idealistic. It does not correspond to facts. The motives to economic activity in India are essentially the same as those which operate in Western countries, though Professor Mukerjee thinks they are radically different

Human nature here is fundamentally the same as in the West. Professor Mukerjee contrasts the limitation of wants which Hinduism preaches with the multiplication of wants in the West. How far is the limitation of wants practised in India? It is true that many people in India are satisfied "if they can get a morsel of food twice a day without being borrowers to anybody." Their contentment, which Professor Mukerjee ascribes to racial habit, is largely the outcome of poverty. It would be interesting to know the number of people possessing wealth and property who strive to realize "the ideal of self-denial as the means for the realization of God in man." Far be it from me to deny that there are many noble men and women in India who do not care for wealth. Such men and women are to be found in every country. Economics is not directly concerned with them. It is chiefly concerned with the vast majority of the people in every country in whose case the desire for wealth is one of the strongest incentives to activity. It cannot be denied that in this desire for wealth the vast majority of the people of India, of every religion and of every class of society, find the main spring of their activity. There is only one plane of living, one standard of consumption, in India, says Professor Mukerjee, but "in theory," as he is careful to add. As a matter of fact, there are many planes of living and many standards of consumption in India. The ideal of plain living and high thinking does not dominate all, it dominates a few individuals here and there. Professor Mukerjee's view seems to be that our economic organization

is, somehow, spiritualistic, while that of the West is materialistic. But it may be doubted whether an average individual in India, engaged in any industry, whether agricultural or manufacturing, is much more spiritualistic than an average individual in the West. It is all very well to talk about "the limitless vistas of the development of the soul," in which the Indian is supposed to find his source of inspiration, but one should not forget that this kind of talk is unpractical, and that it does not help much in the solution of the real problems of the country.

Professor Mukerjee thinks that in our system, based as it is on land, there is only exploitation of nature by man, and no exploitation of one class by another. Again he ignores facts. How does the absentee landlord of Bengal live? What work does he do? What about the majority of the Talukdars of the United Provinces, and the rent receiving classes in other parts of India? Again, while it is true that the rise of prices has enriched large cultivators, it cannot be denied that agricultural labourers have not shared in their prosperity. On an average the unskilled agricultural labourer earns about eight annas daily; in some parts of India he earns much less. The rise of prices has reduced his real wages. While he has helped to make the fortunes of large cultivators, he himself remains sunken in poverty. Is he not exploited by those who employ him? There are no strikes and lock-outs in the agricultural industry, not because there is any "real concrete equality between man and man in the

Indian economic organization," but, because our labour is not organized. If organizations of agricultural labourers and rural artisans were in existence at the present time, their wages would not have been so low as they are. It is wrong to think that there is no conflict of interests in the Indian system. The landlord cannot do without the labourer, nor can the capitalist employer do without the factory hand. And yet wherever labourers work for a master, whether in the factory or in the field, a conflict of interests arises and exploitation begins. It will be said that the number of labourers in India, whether urban or rural is comparatively small, and that, for the most part, people here work on their own account. That is true enough, but we are in no case justified in ignoring the Indian labourer—he forms part of our population and he is the poorest member of our community.

Wealth is produced in India by a large number of men each working independently. "It is the production of wealth by free men." This system has its advantages as well as its defects. The average size of the holding in India is small. The resources of the Indian cultivator are small and his power to make improvements is very limited. Almost every small cultivator is in debt. A Punjabee cultivator, when asked about the cause of his indebtedness, replied that he had to repair his *Luckcha* house. How can you expect a cultivator who has no money to repair his house, to make improvements? He cannot buy agricultural machinery and he cannot try experiments.

Wealth is produced in India by free men, but the amount of wealth that is produced is small.

Nor is the Indian economic organization so stable as Professor Mukerjee seems to think "The Indian economic system never gets out of joint. Economic disasters are unknown in India." One wonders if Professor Mukerjee is talking about this India of ours or some other India which his own imagination has created. Agriculture is the most precarious of all industries, since it depends on an uncertain rainfall. Our economic system gets out of joint very frequently indeed. A famine is an economic disaster and famines are only too common in India. What Professor Mukerjee means by saying that our economic system is to be regarded "not as the temporary equilibrium of rival forces, but rather as the permanent equilibrium when motion and energy are restricted in their operation in their proper spheres," is difficult to understand. There are, of course, no strikes and lock outs in the agricultural industry because of the absence of combinations of labour and capital, but a study of the history of Indian famines would show how very unstable the equilibrium of economic forces is in India. Capital may persuade labour to work by reducing the number of hours of work, or by offering a higher monetary reward for labour. But nature cannot be persuaded to work when she is not in the mood. Two or three famines, following close upon the heels of each other, would absolutely ruin the cultivator and reduce the rural labourers to beggary. It is this instability of the Indian

economic organization which is the chief cause of the instability of Indian finance.

It is interesting to learn that the Indian craftsman is maintained, not exploited, by his friends, the money lender, the middleman and the trader. The craftsman looks towards the money-lender "with due reverence," and the money lender, we suppose, loves him as a brother. Why is so much written about rescuing the craftsman from the clutches of the money lender when the money-lender maintains the craftsman and the craftsman looks towards the money-lender "with due reverence"? According to Professor Mukerjee, there is no exploitation of one class by another in the Indian system, but he must know that the rate of interest charged by money lenders, in many places, is as high as 36, 48, or even 60 per cent. There are many methods of exploitation besides wage slavery.

In what sense can India be said to be more busy with distribution than production? Not in the sense that there is any real equality of wealth in India. An equitable distribution of wealth does not, of course, mean equality in distribution, but if wealth were more equitably distributed among all classes of the community we should hear less about Indian poverty than we do. Not that India is not poor. The official estimate of the average annual income per head of the whole Indian population in 1898 was only £2, or 2½ rupees monthly. According to Professor Slater of Madras the income per head has increased, his own estimate of the average income per head in

Madras, in 1916-17, is Rs. 72. Assume that the average income per head for the whole of India has risen to Rs. 72 annually, or six rupees monthly. In order that the average should be Rs. 6, if many earn more than Rs. 6, many more must earn less than Rs. 6. Inequality of income causes inequality of wealth. Before any one would persuade us to believe that the present distribution of wealth in India is equitable, he would have to convince us that the inequality of incomes in India is in all cases due to justifiable causes.

We have tried to show that the motives which lead to the production of wealth in India are the same as in the manufacturing countries of the West, that there is the same inequality in the distribution of wealth in India; that there is the same exploitation of labour by capital, and that the economic organization of India is even more unstable than that of a manufacturing country. We should cease to think that the Indian system, since it is based on land, is superior to the Western, or that our system is founded on justice or equality while the Western is based on exploitation and iniquity. Professor Mukerjee describes in his book the appalling poverty of the labouring classes in the West. Is the labourer in India, whether urban or rural, more prosperous? The labourer in England or America is far better housed, fed, clothed and educated than the Indian labourer. There is unemployment in Western countries, but the amount of this unemployment is small as compared with the

unemployment caused by a single famine in India. It may also be pointed out that labourers in India, being spread over the whole country will find it difficult to combine. Trade Unions are easily formed in a manufacturing country for in such a country labour is concentrated in towns. Trade Unions have done a good deal both directly and indirectly to improve the conditions of labour. The position of the craftsman in the domestic system of industry is generally not a happy or a comfortable one. He depends on the money lender and the middleman and more often than not he is exploited by both. As the craftsmen work in their homes it is impossible for them to know as much about prices, wages and the conditions of the market as the middleman. A clever trader can easily play off one craftsman against another. The sweating system is the product of the domestic organization of industry. It cannot flourish where a large number of labourers work together, as in a manufacturing town.

Machinery it is said dehumanizes labour. It makes work mechanical and has a narrowing effect upon the mind of the worker. It may be argued on the other hand, that with the introduction of machinery the demand for skilled labour has increased that some machinery is highly intricate and requires a high degree of intelligence, mental alertness and resourcefulness on the part of the operative. The objective gains of machinery are immense. Hours of work in all trades in all manufacturing countries have become shorter. Means are being devised for the

settlement of industrial disputes without recourse to strikes and lock-outs. Attempts are also being made to make industrial towns healthy and beautiful. Altogether the labourer in Western countries has not much to complain of.

Those of us who are opposed to Western industrialism and want India to pursue her ancient line of economic evolution, should remember two things firstly, that an agricultural country means a poor country and that the growth of civilization with all that it implies depends upon the growth of town life, which, in its turn, depends upon the growth of industrialism, and secoudly, that the days of India's economic isolation are long since over, and that international competition will force her, and is forcing her, to adopt Western methods of production, whether she likes it or not. The economic future of a great country cannot be based upon hand weaving and hand spinning, when other countries with which it competes have increased their productive power a thousand fold by the use of complex machinery. It is also useful to remember that, as shown by the war, our banking and currency system, our credit organization and our markets are bound by the closest ties with those of other countries. The connection of India with the Western world is a fact of great economic importance. It is essentially wrong to think that methods of production and forms of economic organisation under which we prospered four hundred years ago are, for that reason, the most suitable to-day. The economic salvation of India lies in the gradual assimilation of what is

best in Western industrialism and in the adoption of methods of production which universal experience has proved to be the most scientific and economical, and of forms of business organisation which would bring her more into line with Western countries.

A General View of Indian Prices

In his interesting work "Stabilizing the Dollar" Professor Fisher compares Indian prices with English prices from 1861 to 1912 in order to show "that when a country shifts from a gold to a silver standard, and from a silver to a gold standard, as did India, its price movements shift likewise".* He finds that there was some similarity between Indian and English prices in the periods 1861 to 1873, and 1894 to 1912, but little similarity in the period 1874 to 1893, the chief exceptions being the years 1874 to 1878, when the two curves show similarity instead of dissimilarity, and 1894 to 1899, when the curves show dissimilarity instead of similarity.

From 1861 to 1873 European prices were rising. The rise in fact commenced much earlier, in 1849. It was chiefly due to the great increase in the world's gold supply, consequent upon the discoveries of Australian and Californian gold fields. The rise of prices in India was due to the large influx of silver which began about the time of the Mutiny, and which the cotton famine caused by the American War of Secession stimulated. The opening of the Suez Canal, which linked

Indian markets more closely with the markets of the world, also tended to raise prices. In particular years, as 1854, 1866, and 1869 the rise was accentuated by famine. The rise of the index number from 98 in 1863 to 115 in 1866 was due to famine. The famine of 1869, again raised the index number from 98 in 1868 to 105.

A heavy and almost continuous fall in European prices commenced in 1873, which lasted till 1896. During this period the gold price of silver also fell heavily. How did the fall in gold prices, and particularly the fall in the gold price of silver, affect Indian prices?

The table given at the end of the chapter shows the movements of Indian and English prices from 1873 to 1885. With certain exceptions the two movements were similar. During the whole of this period Indian prices were gradually falling. The exceptions are the years 1877-78, when Indian prices rose on account of famine, while the index number of English prices registered a fall of 7 points. There was also a small rise in 1874 and again in 1884. On the whole prices fell, the amount of the fall in 1885, as compared with the year 1873 being 13 points.

A fall in the gold value of silver must affect the prices of commodities, which enter into international trade, in gold and silver using countries. If gold prices remain constant, then silver prices would rise, for, except during a short period, the silver price of a commodity in a silver-using country, and its corresponding gold price in a gold-using country cannot differ by more than the cost of transporta-

tion between the two countries. If, while the gold price of silver was falling, gold prices in England had remained stationary, prices in India would have been forced to rise. But gold prices fell with the gold price of silver. In such a case adjustment takes place either by silver prices remaining constant while gold prices fall, or by some degree of fall in both gold and silver prices. Silver prices would particularly tend to fall if the degree of the fall in gold prices was greater than the degree of the fall in the gold price of silver. Now, as a matter of fact, the fall in English prices was much greater than the fall in the gold price of silver, as can be seen from the following index numbers :—

Year.	Sauerbeck's index number of gold prices.	Gold value* of silver.
1873	100	100
1874	92	98
1875	86	96
1876	86	89
1877	85	92
1878	78	89
1879	75	66
1880	79	88
1881	77	87
1882	76	87
1883	74	85
1884	68	85
1885	65	82

* Modern Currency Reforms by E. W. Kemmerer, p. 18

By the year 1885, while the gold value of silver had fallen 18 per cent. the fall in English prices was no less than 35 per cent. The inevitable adjustment took place in India by a fall in silver prices. The tendency towards such an adjustment must have been strengthened by the closer linking up of India with England made possible by the great development of steam traffic, the rapid progress of railway construction in India, and the considerable fall in sea-freights which occurred during this period. On the whole it cannot be said that Indian and English price movements in the period 1873 to 1885 were dissimilar.

During the next period of ten years, from 1886 to 1895, Indian prices were much affected by scarcity conditions in some parts of the country. The index number for food grains rose continuously from 100 in 1885 to 123 in 1888, and again from 119 in 1889 to 148 in 1892. The rise in the prices of food grains and other agricultural produce tended to raise the general index number. During the period 1887-92 there was no fall in English prices—prices at first rose a little and then remained stationary. But while English prices fell continuously from 1892 to 1896, the movements of Indian prices were irregular, the index number first rising from 98 to 102, and then to 105, falling to 102 again, and again rising to 104 in 1895, and 110 in 1896.

The Indian mints were closed to the coinage of silver in 1893, and the exchange value of the rupee was fixed at 1s. 4d. Exchange, however,

showed little tendency to rise immediately to the official rate, and it continued to be low till 1895 when it reached its lowest point. Then it began to rise, and in the latter part of the year 1897 it nearly reached the 1*bd.* *par.* In January 1898 it touched 1*s.* 4*d.* though in the following months it was more frequently a little below 1*s.* 4*d.* than a little above it. The whole period from 1895 to 1899 was a period of the appreciation of the rupee, that is, its purchasing power in terms of gold increased. Was there any tendency towards a rise in the purchasing power of the rupee in terms of commodities also?

The famine of 1896-97 falls in this period, and, in consequence, food prices in 1896 and 1897 were very high, the index number for food grains rising to 155 in 1896 and 209 in 1897. If due allowance is made for the influence of the famine, the tendency of Indian prices was on the whole downward. Professor Kemmerer shows that if the prices of cotton, opium, linseed, jute, jute-gunny bags, tea, cotton yarns, tea-cloth, indigo and hides are considered, it is found that, with the exception of jute, all prices were lower in 1897 than in 1896; that with the exception of cotton, jute, and cotton yarn, all prices were lower in 1897 than in 1895, and that all but three (tea, indigo and cotton cloth) were lower in 1898 than in 1897.* There was thus, on the whole, some tendency towards an increase in the purchasing power of the rupee in terms of commodities at the very time when the rupee was appreciating in terms of gold, that is, a tendency to an inverse

* *Modern Currency Reforms* p. 61.

correlation, with a lag, between exchange rates and general prices. Professor Kemmerer however, is careful to point out that the correlation was not appreciable. It should be remembered that the rate of exchange is determined by the demand for and the supply of foreign bills representing the right to receive so much gold in a foreign centre, and as such it is subject to peculiar influences of its own. A fall of prices in India may not be accompanied by a fall in the price of gold in terms of the rupee in the short run, and a rise of general prices, owing to a redundancy of the currency or any other cause, will not necessarily, in the short run depress exchange. This fact deserves emphasis as the stability of exchange during 1899 to 1912 has been used as an argument against the possibility of the currency having become redundant during this period. This point is discussed more fully in chapter V.

European prices reached their lowest level in 1896, after which they commenced to rise. The rise was almost continuous till the out break of the European war when a new period in the history of world's prices begins. Indian prices also rose in this period and what is most strange and almost inexplicable the rise in Indian prices was greater than in any other country of the world. This is shown by the tables given below. In Table I the average for 1895 is taken as 100, in Table II the year 1896 is taken as the base year for European countries, and 1894 for India. Indian prices were lowest in 1894.

The year 1893 would not be a good base for Indian prices, as on account of the famine of 1896-97, prices were abnormal in that year.

Index numbers of wholesale prices

TABLE I

	United Kingdom Sauerbeck	France	Germany	U.S.A.	India
1895	100	100	100	100	100
1896	99	97	99	95	111
1897	100	99	102	94	135
1898	103	103	108	100	122
1899	110	113	113	108	121
1900	121	120	120	116	141
1901	113	114	116	116	125
1902	112	111	113	120	129
1903	112	114	119	131	135
1904	113	113	120	120	124
1905	117	114	124	124	130
1906	124	125	134	130	151
1907	130	132	145	139	155
1908	118	119	131	130	165
1909	120	121	135	135	155
1910	127	134	140	141	154
1911	130	137	152	141	156
1912	137			145	165

TABLE II

	United Kingdom Sauerbeck	France	Germany	A U	India
					1894=
1896	100	100	100	100	100
1897	101	103	103	99	141
1898	104	107	109	104	125
1899	111	116	114	113	127
1900	122	125	122	122	148
1901	115	118	117	120	141
1902	113	115	114	125	135
1903	113	118	121	126	130
1904	115	116	122	125	129
1905	118	118	125	128	141
1906	126	129	136	135	158
1907	131	136	146	144	162
1908	119	124	132	135	173
1909	121	126	137	140	162
1910	128	132	141	146	161
1911	131	141	154	142	164
1912	138			151	173

Table I shows that in 1911 Indian prices rose 56% as compared with the 30% rise of prices in England 37% in France 41% in the United States and 52% in Germany. Table II shows that the percentage rise was for India 64, Germany 54, U.S.A. 42, France 48, and England 31.

The rise of prices in particular years was due to famine, but it is generally true that after 1905, prices after a famine year do not return to the old level with the return of favourable agricultural conditions. What is the explanation of the great rise in Indian prices ? Was the rise due to the linking up of the Indian monetary system with that of the gold using countries of the world through the gold exchange standard ? In view of the fact that the rise of prices in India was greater than in those countries, this explanation seems to be inadequate. The Prices Enquiry Committee was justified in concluding that "since some of the factors which raised prices in other countries, as protection and monopolistic combinations, were non-existent in India, some other special influences must therefore have been at work here to have raised the price level to a height considerably above that to which it could have been raised by the influences that have caused a general rise throughout the world".*

I have tried to show that special causes were at work in India which raised our prices above the level of European prices.† These causes were connected with the nature of our monetary system. The whole question of the Indian monetary standard in relation to its effect upon prices deserves to be carefully studied. The gold exchange system may enable a silver using country to secure stability of exchange with gold using countries, though recent experience disproves

* Report, p. 51.

† See Chapter V.

this, but stability of exchange is not the only test of the soundness of the gold exchange system. And it is true that a currency of token rupees does not fluctuate as a currency of full value coins which can be melted or exported, would fluctuate, it may well happen that while world prices in the coming years fall as they are falling, our prices may become stationary at the present level with a tendency to rise.

Before the war Indian prices were rising more rapidly than European prices during the war the movement was reversed. The fact that Indian prices rose more slowly during the war than European prices led the well known American economist Mr W C Mitchell to suppose that commercial organisation in India was less advanced and that custom still played an important part in economic and social life. In his *"International Price Comparisons"* Mr Mitchell compares Indian and American price fluctuations during the war and thus comments on the result —

'Oriental prices in the past have moved more sluggishly than occidental prices. Commercial organisation is less advanced and custom plays a larger role in economic as well as in social life. The remarkable fact brought out by the Japanese and Indian comparisons is not that increase in price was less than that in the distant seat of war or in America on which the belligerents were drawing so heavily for supplies from the beginning of hostilities. It is rather that the evolution of European prices caused by the war

affected so powerfully the economic fortunes of the brown and yellow millions on the opposite side of the globe."*

Now, as we have seen, it cannot be said about Indian prices that "in the past they have moved more sluggishly than occidental prices." Indian commercial organisation may be less advanced than the American or European, and there is much economic friction in India. That, however, did not prevent Indian prices from rising more rapidly before the war than European prices. The slower movement of Indian prices during the war was not due to the influence of custom or defects in commercial organisation, as Mr. Mitchell supposes. The causes which raised prices in Europe and America were also at work in India, but in a much attenuated form. The great rise of prices in Europe was due to paper inflation and in America to gold inflation. There was inflation in India, but its extent was much less than in Europe and America. This simple fact largely explains why the movement of our prices was slower than that of European or American prices.

Western writers have always regarded India as a land of custom and tradition. Mr. Mitchell finds that Indian prices rise less than American prices, and he quietly assumes that it must be due to custom. It does not occur to him that the effect might be due to other causes of a wholly different nature. Similarly Professor Kemmerer, a

* International Price Comparisons by Mr. W. C. Mitchell
p. 37.

close student of Indian currency problems, in accounting for the absence of any appreciable correlation between the rise in exchange and the fall in prices during the period 1895-99 invokes the aid of custom.—

"While there are forces that tend to cause a rough correlation between the two movements, the price movement tends to lag behind the 'exchange' movement, and the response is particularly slow and impeded by economic friction in a country like India, with its isolated communities, and its respect for custom."*

And again,

"While India's exports and imports in the absolute are large, still, in the main, the people of India live on their own products, and a large part of those products run their life history from production to consumption in a very small territory. They have only the remotest connection with foreign trade, gold, and the gold exchanges."†

One familiar with the Indian economic conditions at the present time would be inclined to regard the extravagant emphasis placed on the isolation of communities and on custom as not true to fact. So far as the determination of prices is concerned, particularly the prices of commodities which are exported and imported, the influence of custom in India is neither greater nor less than in other countries. The movements of our prices before the war show that India is no

Mehta's Currency Reforms, p. 63

† Ibid, p. 64

longer an isolated country. There are no isolated communities in India. India is covered by a network of railways which have closely inter-connected the remotest parts of the country. The isolation of the Indian village is a thing of the past—it was broken by the railways. That the price movement should have lagged behind the exchange movement is not incomprehensible. That would be so not only in India but in the most advanced country in the world. It is also not true that a large part of our products have "only the remotest connection with foreign trade, gold, and the gold exchanges." Almost all important food grains and raw materials are exported in large or small quantities; all kinds of manufactured goods are imported. The extent to which we do not live on our own products, particularly as regards manufactured goods, was realised fully during the war. Foreign trade has a good deal to do with the prices of our food grains and our raw produce. The prices of millets like *jwar* and *bajra* may not be directly governed by the world price, but they are influenced by fluctuations in the price of wheat. And the effect of the sensational rise in our exchange in 1920 to 2s. 10^d. and the equally sensational drop in exchange in 1921 to 1s. 2^d., upon our export and import trade and the prices of exported and imported articles is only too wellknown.

India is changing very rapidly, politically as well as economically. The semi-mediaeval conditions which most European writers imagine still exist in India, have disappeared. The study of

prices alone would show how very different India of to-day is from the India of fifty years ago.

I may also say a few words here about the effect of the rise of prices. There is a general agreement now that the rise in the price of food grains is not an unmixed blessing to an agricultural country like India. It enriches the large farmer who has a good deal of land and who produces more than he consumes. But India is a land of small farmers—the average size of the holding here is small, and on account of the laws regarding the sub-division of land, it tends to grow smaller. The Babington Smith Committee recognised (and the views of the Committee were fully accepted by the Government of India), that "The agriculturist who has little surplus produce to sell and lives on what he produces, would, in so far as he maintains himself on his own produce, be unaffected by a rise in the price of food stuffs" and that very often the increase in value benefits, not the cultivator but the money-lender, who makes advances to the cultivator for his maintenance and seed. The Government of India in a memorandum submitted to the Committee stated that "There is no longer any room for doubt that the resultant increase in the expense of living due to the high prices of food grains, also of other necessaries, such as cloth, kerosine oil, and the hardship which the increase has entailed on the poorer classes and those on fixed incomes, has been a very important factor in promoting unrest and discontent."

One is glad to note that the Government of

India and official writers generally take a more sensible view of the whole question now than they did sometime ago. Not long ago the theory was propounded by Mr. Datta of the Prices Enquiry Committee that rising prices were beneficial to an agricultural country. "There can hardly be any doubt," he said, "that in an agricultural country like India, rising prices would be beneficial to the country as a whole."* The view that the greater portion of the community is benefited by falling prices, Mr. Datta thought, was applicable to an industrial country, not to an agricultural country like India, where 73 per cent of the population are dependent upon agriculture. Mr. Datta estimated that about 70 per cent. of the population benefited by the rise in prices before the war. But in a memorandum which he prepared for the Babington Smith Committee we find Mr. Datta speculating as follows regarding the effects of the rise in the prices of agricultural produce. "A considerable proportion of the agriculturists and labourers live from hand to month, and the unprecedented rise in the prices of the bare necessities of their lives is pressing very hard upon them. The only classes of agriculturists who are able to sell a considerable share of their own produce and thus get a substantial income are those who grow rice in Burma, wheat, cotton oil-seeds and jute, and even many of these cultivate these things only to a comparatively small extent, and were able to save little or nothing in pre-war times. The total acreage cultivated with these crops is only about

* Report on the Enquiry into the Rise of Prices, p 136

25 per cent. of the total cultivated area, namely rice in Burma 4, wheat 9·5, cotton 5·0, oil-seeds 5·1, and jute 1, so that high prices may at best benefit only 25 per cent. of the agriculturists, or about 12½ per cent. of the whole population. In many of these cases, ignorant and un-educated as the great majority of them are, the profit accruing from high prices have not reached them, but have only filled the pockets of the middleman and exporter. A fall in prices will therefore be welcome to probably about 85 per cent. of the population."

It is somewhat difficult to understand why, if 70 per cent. of the population were benefited by the rise in the prices of agricultural produce in pre-war days, 85 per cent. of the population should welcome a fall in prices now. The percentage of the total area cultivated with rice, wheat, cotton, oil-seeds and jute was not higher before the war when Mr. Datta made his investigations. One would also think that the Indian cultivator was not less ignorant and un-educated in the pre-war days than now, and, therefore, it was not more difficult for the middleman and the exporter to cheat him of his legitimate profits than at the present time. More than four years ago the present writer criticised the theory of the Prices Enquiry Committee (accepted by the Government of India) that India being an agricultural country, the rise of prices must be beneficial to the country as a whole. The subject is discussed more fully in its proper place, and it is not necessary to quote those views here. But it may

be well to remind all those who build nice theories of the prosperity of India's small farmers on very slender evidence, of the views of Hassu, a small farmer, who, when questioned on the subject, said,

*Mian bechan tan mehngiyar da savad ae ;
dane khane joge nahin honde , sanu mehngiyar da
ki savad ae,**

Index Numbers of Prices in India and England.

Year.	India.	England (Sauer- beck)	Year.	India.	England (Sauer- beck).
1861	90	88	1873	100	100
1862	90	91	1874	101	92
1863	98	93	1875	94	86
1864	111	95	1876	90	86
1865	107	91	1877	104	85
1866	115	92	1878	106	78
1867	108	90	1879	104	75
1868	98	89	1880	104	79
1869	105	88	1881	96	77
1870	102	86	1882	92	76
1871	93	90	1883	89	74
1872	98	98	1884	91	68

*The rise of prices would mean something to me if I had anything to sell. What I produce is barely sufficient for my own consumption. The rise of prices means nothing to me.

*Index Numbers of Prices in India and
England--concl'd*

Year	India	England (Sauer beck)	Year	India	England (Sauer beck)
1885	87	65	1902	105	
1886	89	62	1903	99	
1887	91	61	1904	101	
1888	96	63	1905	110	
1889	101	65	1906	129	
1890	100	65	1907	137	
1891	98	65	1908	138	
1892	102	65	1909	124	
1893	106	61	1910	122	
1894	102	61	1911	129	
1895	104	57	1912	137	
1896	110	56	1913	143	
1897	113	55	1914	147	
1898	96		1915	152	
1899	96		1916	184	
1900	116		1917	196	
1901	110		1918	225	

Prices before 1861

Who has not heard old people in the Punjab, may be a grand-father or a grand mother or a great-grand-uncle—say that when *they* were young, living was not so costly as now, that on Rs. 25 a month one could live in a fair degree of comfort, and on Rs. 50, like a prince? That the prices of the necessaries of existence were almost incredibly low in the early days of British rule in the Punjab and in Sikh times, is shown by the available statistics of early prices and incidental references in books of travel. Travelling through the hill tracts of the Punjab on his way to Kashmir via Jammu, in 1835, Baron von Hugel on enquiry found that the price of rice in the village of Hablihatti, near Bilaspur, was 5 seers for a ' packa ' pice. He says:—

“ It was the rice crop. I asked a peasant whether it was a good one. He said ‘ Yes,’ and

on my further questioning him I received the answer that 5 seers (10 lbs.) of rice cost one ' packa ' pice. I found this to be very little, but pretending that I considered it to be high, I said, ' I see that you take me to be a European who does not know the prices ; from an Indian you would not demand so much.' The peasant laughed and said that I was right."^f

Baron von Hugo noted the disinclination of the people in the hills to hard work. This he attributed to the cheapness of the necessities of existence, particularly food grains, which enabled a coolie by working one day in a month, to procure enough food for himself and his family for the whole month. He says :—

" In the Punjab coolies are usually not paid anything at all. They are compelled by the Government, without whose permission no one is allowed to travel in these parts, to work for nothing (*begar*). However, I did not wish to take advantage of this system, but to pay the poor men their proper wages. The wages for a day's work, thanks to the low price of rice, are equal to the quantity of rice sufficient for not only the coolie but his family, for a whole month."^g

Some tables of early prices in the Punjab are given at the end of the chapter. These figures

^f Kashmir und das Reich der Sikhs, Vol 1. p 65.

^g *Ibid.* p. 67.

deserve a careful study. The tables show that prices in good years before the era of railways were very low, and that the fluctuations of prices from year to year, were, not infrequently, great and violent. Price movements were most irregular. The export of food grains, though it is undoubtedly responsible in a large measure for the rise of prices during the last forty years, still exercises a steady influence on prices in the sense that it prevents large irregular oscillations. Prices do not fall heavily when the harvests are good, nor do they rise sharply when they are poor. But it was not so three quarters of a century ago. For example, the quantity of wheat sold for a rupee in Montgomery fell from $47\frac{1}{2}$ seers in 1848 to $23\frac{1}{2}$ seers in the following year. It increased to $37\frac{1}{2}$ seers in 1850 but fell to 20 seers in 1851 and rose to $52\frac{1}{2}$ seers in 1852—a fall in price of more than 60 %. In the town of Haripuri Hazara the price of wheat in 1852 was a little less than 8 as a maund, in 1853 it rose to a rupee. In 1860, in the same place, the price was 12 as. a maund and in the following year two rupees—a rise of 166 per cent in one year. There were also great variations in prices in different places at the same time. Pakpattan, Dipalpur, and Hujra are in the same district—Montgomery, but in the year 1849, while wheat sold at 42 seers a rupee in Pakpattan, the average quantity to be obtained for a rupee in Hujra and Dipalpur was $23\frac{1}{2}$ seers only. Mandal and Muktsar are both in the Ferozepur district, but differences in prices in the two places, as shown by the figures given below, were sometimes considerable.

Seers per Rupee

Wheat

	1847	1848	1851
Mandal	36	35	40
Muktsar	21	24	21

Gram

	1843	1845	1854	1857
Mandal	34	42	37	60
Muktsar	72	126	90	108

Jwar

	1853	1857	1858
Mandal	80	100	90
Muktsar	124	63	140

Differences in prices between two distant places were as might be expected, still more remarkable. To give one or two instances, barley sold at the scarcity price of 18 seers per rupee in Panipat in 1860 while no less than 101 seers could be obtained for a rupee in Mandot Ilaqa. The price of rice per maund in Pakpattan in 1855 was about 9 as, in Haripur Hazara, it was exactly four times as high.

Such differences in prices are unknown to-day. Prices of course are not exactly the same in all parts of the province but ordinarily they do not differ by more than the cost of transportation. In those days each place had to be more or less self sufficient, as means of communication were few. A good harvest gave a surplus, but there were no means of getting rid of the surplus, and prices fell. In a bad year scarcity

caused prices to rise, but there was little importation of food from outside. The sufferings of the people when scarcity amounted to famine were terrible. In the 'San Chalisa' famine (1733. A. D.), price of wheat in the Sialkot district rose to 18 seers, then to 6 and finally to 1 $\frac{1}{2}$ seers, "Numbers of people fled to Cashmere," says Mr. Prinsep in his Report on the Revised Settlement of the district, (dated 1851) "and there was great mortality over the land." In the 'Dus Maha' famine of Sambat 1869, (1812.A.D.), wheat sold at 6 $\frac{1}{2}$ and *Bajra* 8 seers. "It was remarked that a new grass was produced over the country on which people subsisted, and they gave it the name of 'Gharoshune'. In the next famine of Sambat 1890 (1833 A.D.), wheat sold at 8 and 10 seers. "The distress in this District," says Mr. Prinsep, "was very great, and had been aggravated by the very heavy assessment which preceded it. People remember it as the 'Murkunewala' year from a shrub which grew abundantly, and which was mixed up with the food eaten." Famines visit the land very frequently even now, but generally speaking it is true that deaths by starvation have become a rare occurrence, and that people are not reduced to the necessity of subsisting on shrubs and grass even in the worst famine.

The chief feature of the early Punjab prices is the great fall which occurred in the first three years after annexation, and which was the cause of no small amount of embarrassment to the Government. Fixed money assessments were

substituted for grain payments in 1847, but the prices assumed for the assessment of land were too high. "Collections became difficult"; says Mr. Prinsep, "I had to give large remissions; and from that date, 1851, till 1858, the effects of former high settlements were felt on all sides. In the Churkuree Mehal, particularly, people absconded, wells were lying neglected, and nothing short of immediate relief would have saved the irrigated tract, and to give this the new assessments were more expeditiously brought about."

The land tax was reduced everywhere. "In the whole of the Punjab the reduction of the land tax may be estimated to be equal to twenty five per cent, exclusive of any extras which may have been levied" says the General Report upon the Administration of the Punjab for the year 1849-50 and 1850-51. In spite of the reductions complaint on the part of the agriculturists were "loud and general". The chief cause of their distress was the fall in prices. Production had exceeded consumption and there were no markets to which the surplus could be exported. The causes of agricultural distress are well analysed in the Administration Report (1849-50 and 1850-51):—

"For the three first years after annexation the harvests, with a few isolated exceptions, were remarkably favourable. For twenty years, the agriculturists declare, they had never witnessed such crops of wheat and barley. Not only did the unirrigated lands usually under cultivation yield a particularly large return, but cultivation

was greatly extended. Lands which in ordinary seasons were seldom sown, gave large returns. These circumstances, joined to the general peace and security of the country and the fact that large bodies of disbanded soldiers and discharged employees had to turn attention to agriculture for a subsistence, all contributed to cause so great an increase of produce as to reduce prices to an unprecedented extent. The result of these different causes has doubtless been that production has exceeded consumption, and hence that while an abundance of food exists, there is not a sufficient market to secure its sale at remunerative prices. No countries surround the Punjab to which any great quantity of grain could be exported. To the west the disturbed state of Afghanistan and the difficulties and the cost of transit must prevent the export of food. To the south are Sind and Bhawalpur, the former producing more than it consumes, the latter a poor and thinly peopled tract. To the east is the Jullundher Doab, densely peopled, but so fruitful in its own soil as fully to support the inhabitants. To the north are the hills whose inhabitants have not the means of purchasing our surplus produce".

The writer of the report, evidently did not foresee the rise of the great export trade by sea which now carries away all our surplus food and even more to foreign lands. The net-work of railways which connects the principal markets of the Punjab with Karachi did not then exist. Thirty years later, however, we find a settlement officer thus predicting the future course of the

prices of food grains and justifying the prices that he had adopted for assessment :—

" I do not think that the adopted prices are too high. They rather err on the side of lowness. It is probable that the average prices current of the next 20 years will show considerably higher rates. The opening of the railway to Karachee and the thereby increased facility for exporting grain to Europe will most certainly tend to keep up the price of food grains in the Punjab. It will prevent all accumulation of grain. As soon as the price of wheat falls to the point at which it becomes profitable to export it to Europe it will be exported and prices will hardly ever fall below this minimum." (*Report on the Revised settlement of the Jhang District of the Punjab, by L. B. Steedman Esq., Settlement Officer*).

The price of wheat in the Punjab to-day is determined by the world price of wheat, and as the price of wheat regulates the prices of inferior food grains, it may be said that the causes which determine the prices of food grains in the Punjab to-day, whether directly or indirectly, are not local but of world-wide significance.

Prices continued to be low till about 1860, after which they began to rise. For the first two or three years after 1860 the rise was due to famine, as also in 1868-69, but it is broadly true that after 1865 prices show a marked upward tendency. What were the causes of the rise of prices?

The improvement of communications was undoubtedly an important cause of the rise of prices." "The opening of the Sindh Punjab and Delhi Railway, which took place about twelve years ago", says the Settlement Officer, Mr. T. Gordon Walker, in the *Final Report on the Ludhiana District* (1878-83), "has by extending the market for the produce of the district, once and for ever, one might say, brought up prices. The principle that supply follows demand has been establishing itself in practice and nothing short of a decided fall in the value of agricultural produce all over India, and we may add Europe, will make prices recede towards their old level."

The opening of the Rewari Ferozpur Railway caused prices to rise throughout that tract. The peasants of even out-of-the-way villages carefully watched the state of the market and brought their grain long distances to sell for cash at the market rates in Sirsa and Fazilka. The ordinary rate of carriage was one anna per maund per stage of ten or twelve miles, and the differences in prices between different parts of the Sirsa district were never for any length of time greater than this. When there was demand towards Sindh, the peasants within reach took their grain to Fazilka, and if the demand was towards Delhi, grain went to Sirsa.

The state of things in other districts of the province was similar. As more and more places got linked on to the central markets and sea-ports by the railway, the wide fluctuations in prices, such as were common before 1860, ceased.

Another cause of the rise of prices was the increase in the circulation of money. In the *Report on the Revised Settlement of the Shahpur District, dated 1866*, "the large influx of silver from Europe going on" is mentioned as one of the causes of the rise of prices. During the cotton famine of 1859-60, India, it is estimated, imported £63,000,000 worth of silver. "This enormous addition to the circulation of the country drove up prices with a rush, and before equilibrium had been restored, the introduction of steam carriage from Delhi threw open the markets of the world to India, and perpetuated the high level which had been reached. The famine of 1869 created a temporary disturbance, but for the first five years the seasons have been fair, the opening of the Punjab Railway in 1870, has completed the connection between Lahore and Bombay and prices have stood with an extraordinary steadiness at what may be considered their normal rates"*

The increase in the circulation of rupees, which was made possible by the heavy imports of silver, tended to raise prices throughout India. The extent of the rise is shown by the statistics of early prices of food grains in the United Provinces published by Sir Theodore Morison in his "*Industrial Organization of an Indian Province*" But after the Mutiny money was more plentiful in the Punjab for special reasons. Before the Mutiny the Indian portion of the army employed in the

* *Report on the Revised Settlement of the Farnal district (1872-80)*

Punjab, was largely Hindustanee. A considerable share of the Punjab revenuee was paid to them as their wages, of which they spent a part in the Punjab, and remitted the remainder to their homes. Many lakhs of rupees were thus annually drained from the Punjab. After the Mutiny the soldiers from Oudh were replaced by Punjabees; many thousands of Punjabee soldiers were also serving abroad. "These men", says the *Punjab Administration Report for 1856-57*, and 1857-58, "not only remit their savings, but also have sent quantities of prize property and plunder the spoils of Hindustan, to their native villages".

The increase in the cost of cultivation must have also played some part in raising the prices of agricultural produce. Some settlement reports give the prices of plough cattle and agricultural implements, which show that costs of cultivation were much lower before 1860 than in the period subsequent to that date. The price of a plough bullock in Kot Khai (Simla district) was Rs. 5 in 1849 and Rs. 10 in 1883. The price of a bullock in Jhelum, Pind Dadan Khan, Chakwal and Tallagung at different dates is shown in the following table —*

	At the end of Sikh rule	1858	1877
	Rs.	Rs.	Rs.
Jhelum ..	25	40	55
P. D. Khan ..	15 to 30	30 to 40	20 to 90
Chakwal ..	11	16	45
Tallagung ..	15	22	26

* Settlement Report, Jhelum District, 1881.

PRICES BEFORE 1861

The following table shows the rise in the prices of agricultural

implements used in the Gujarat district —

Vernacular name	English	Cost prices			[1920]*		
		In Sukhi times	About 1870	Rs a P	Rs a P	Rs a P	Rs a P
Hal	Plough	1 13 6	2 5 6	7 0 0			
Panjali	Yoke	0 10 0	0 12 0	4 0 0			
Tarat	Whip	0 1 0	0 1 0	0 8 0			
Nalu	Seed drill	0 2 6	0 8 6	1 1 8			
Sohaga	Clod crusher	1 7 6	2 2 0	7 0 0			
Matra	" small	0 13 6	1 2 0	0 200 0			
Bela	Sugar mill	40 15 9	62 0	50 0 0			
Gurhal	Oil press	3 4 0	6 2 0	0 0 0			
Jhandra	Rake for raising up ridges of earth	0 2 0	0 2 0	0 0 0			
Pahori	Hand scraper work ed by two men	0 1 3	0 1 3	0 0 0			

Kah: Khurpa	Spade Hand hoe	1 4 6 0 2 0	1 0 6 0 2 0	2 0 0 0 8 0
Kulhara	Axe	0 8 6 0 1 9	0 8 6 0 2 0	2 0 0 0 5 0
Datri	Raised stage for watching crops	1 8 0	1 8 0	15 0 0
Manna	Pitchfork	0 1 6 0 3 0	0 1 6 0 3 0	1 8 0 1 8 0
Senguh Trengh Phallah	” Sledgo or harrow dragged by bul locks over the corn when threshing	0 3 0	0 3 0	
Chroha Chharj Gadda	Crowbar Winnowing sieve Cart	0 4 0 0 1 0 19 0 0	0 4 0 0 1 0 24 0 0	1 0 0 1 0 0 100 0 0
	Total	72 10 9	97 8 6	396 13 0

* Settlement Report, Gujarat district, 1874 The figures for 1920

were obtained by my pupil, L. Ram Nath of Gujarat

The Settlement Officer of Karnal had much to say in his Report for that district (1872-80) about the increase in the cost of cultivation. In his opinion the cost of cultivation had risen to a greater extent than the rise in the value of agricultural produce. "The price of cattle has probably doubled since 1840; at any rate that of the more valuable cattle which are needed for working the deep well and still soil of the Bangai and Nardak, and which are for the most part not bred at home. And if the people are to be believed, the cost of all implements of agriculture has increased in almost like proportion. The demand for fuel and the extension of cultivation have rendered the materials dearer, the enhanced cost of living has raised the price of labour and the tendency which has so strongly marked our rule of late years to substitute contract for status and competition for custom has in some not inconsiderable measure, relaxed the customary obligations which bind the village labourers and artificers to the communities among whom they dwell." He also pointed out that the extension of cultivation had led to the substitution of stall feeding for grazing, and that the price of water had increased since 1842 by 150 per cent.

It has been argued by some economists that the increase in the cost of cultivation is the result and not the cause of the rise in the price of agricultural produce in India. The right view, however, seems to be that the rise in the cost of cultivation is a cause as well as an effect, and that the rise in price and the increase in the cost of production

mutually influence each other. The extension of cultivation after 1860 led to an increase in the demand for labour, plough cattle, and agricultural implements, and their prices rose. The price of agricultural produce also rose, the rise being partly due to the increased cost of cultivation.

To sum up : There are two chief features of the early history of our prices, the heavy fall of prices in the first three years after the annexation of the Punjab, and the gradual rise of prices after 1860. The causes of the rise, briefly, were improvement of the means of communication which made it possible for the farmer to dispose of his surplus at remunerative prices, the increase in the volume of the circulating medium and the rise in the cost of cultivation.

WAGES.

In Sikh times and the early days of British rule in the Punjab wages were paid in kind, the amount of the payment for each class of work being determined by custom. A summary of the duties of various village menials and the customary rates of payments for their services in the Gujrat district of the Punjab is given at the end of the chapter. The Sikh Government took its revenue in kind—the land tax under the Sikhs was a share of the produce. The British substituted for this fixed money payments subject to revision at definite intervals. The change of system affected the village menials and the constitution of the village in regard to these menials tended to break up. The proprietors attempted to cut down the cus-

tomary allowances and to make new terms with the *Kamins*. "In many administration papers", says Mr. T. G. Walker, "a condition has been recorded that the relation of the proprietors to the *Kamins* is liable to annual revision, and in some villages there are no customary allowances or services at all, and when a cultivator has any work to be done by one of the class, he pays for it in grain or cash."*

As money became more plentiful and prices rose, the tendency to substitute cash for grain wages increased. We hear of landlords in the Jhang district substituting *China* and other flour for wheat in 1878-80, when prices were high on account of famine, the action being resisted by the labourers. The value of a labourer's wage when it is paid in kind increases automatically with the rise of prices, provided coarser grains are not substituted for wheat, and the amount of the customary allowance is not cut down. It is easy to understand why the landlords were anxious not to give wheat, and to convert wages in kind into money wages.

The introduction of money into the village community had important consequences. The substitution of competition for custom and contract for status may be attributed to it. The position of the *Kamins* in the old village community was not unlike that of the serfs in England in the 13th and 14th centuries. A *Kamen* was not without customary rights and privileges which were clearly

* Settlement Report, Ludhiana district (1878-83).

defined, but he was attached to a village community and to it he definitely belonged. The means of communication were few and labour was practically immobile. When, however, money economy began to replace barter, the old bonds were loosened. The *Kamins*, perhaps, did not desire any change. They were happy and contented under the old system, for they got enough to eat. In most cases it was the greed of the farmer which led to the substitution of the cash nexus for the old customary bonds.

With the rise of prices money wages also rose. The following table shows the rise in wages paid to farm servants per half-year besides food and cloth in the Jhelum district.—*

Farm servants.

	At the end of Sikh rule.			1858			1877		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Jhelum	3	0	0	6	0	0	6	0	0
Pind Dadan Khan	3	0	0	6	0	0	12	0	0
	to			to					
Chakwal	4	0	0	9	0	0	12	0	0
	3	0	0	9	0	0			
Talagang	6	0	0	12	0	0	12	0	0

* Reproduced exactly from the Settlement Report, Jhelum district, 1881. It is not specified there whether the coolies' wages are daily, monthly, or per half-year. Probably they are daily wages.

Cooches

Jhelum	..	0	1	6	0	2	0	0	2	0
Pind Dadan Khan		0	1	0	0	2	0	0	2	0
Chakwal	.	0	1	6	0	2	0	0	2	6
Talagang	.	0	1	0	0	2	0	0	2	5

Commenting on the rise of wages in the Hoshiarpur district Mr J. A. L. Montgomery in the Settlement Report of the district (1879-84) says: "The wages of labour have risen in like manner. Much of the labour performed in the villages is still paid in grain, but it is becoming more common to demand cash. Agricultural servants (*Hali*) used to be content with food and clothing and eight annas a month cash. The common rate of cash now is one rupee, and sometimes more. The pay of an ordinary day labourer is now two and a half or three annas, it used to be one or two annas. The wages of artisans have risen proportionately".

In the Settlement Report of the Hazara district (1868-74) we read: "Prior to British rule a day labourer received his food or an anna per diem; now he can earn two annas a day in the villages, and three annas a day in the towns and cantonments".

The Karnal Settlement Report (1872-80) refers to the rise in the price of labour owing to the enhanced cost of living. It is not difficult to believe

that wages rose more or less all over the province. Such a tendency is shown by the available statistics of the average money wages paid to an able-bodied agricultural labourer in the Punjab from 1873 to 1890 given below. The figure for each year is the average of average monthly wages for six districts of the Punjab, Delhi, Ludhiana, Amritsar, Rawalpindi, Multan and Peshawar.

	Rs	as	p	Index Numbers
1873	5	2	8	100
1874	5	2	0	99
1875	5	7	4	106
1876	5	6	8	105
1877	5	6	8	105
1878	5	6	0	106
1879	5	12	0	111
1880	6	10	0	128
1881	6	4	8	122
1882	6	4	0	121
1883	6	4	8	122
1884	6	2	0	118
1885	6	3	0	120
1886	5	7	0	105
1887	6	12	4	130
1888	6	1	10	118
1889	6	12	9	132
1890	6	4	9	122

*Agricultural wages in the Gujrat district
of the Punjab. Summarised from the
Settlement Report for Gujrat,
dated 1874.*

The blacksmith. Spring harvest. The *lohar* gets one 'bhari' per plough of wheat or barley. A 'bhari' or sheaf is to be as much as can be bound up in the length of 3 straws. Also one *pa* of 4 *topas*, or 8 seers per house (*i.e.*, a family cultivating in common.)

Autumn harvest. One sheaf of *bajra*, *jwar*, *munj* and *makat*. Each sheaf as much as the *lohar* can carry, and also one *pa* of the grain of those products, also one *topa* or two seers of *math* and *mash*.

At the spring or autumn harvest the land-owner, on the receipt of a *datri* or reaping hook, must present the *lohar* a bundle from each crop, a bundle to about the third of a sheaf. If a zamindar or lambardar cuts down a tree, the roots and the branches are the perquisites of the *lohar* for his charcoal.

The carpenter. (*Tirkhan*). He receives from the land-owner the same fees and gifts as the blacksmith, and in addition one rupee on the setting up of a sugar mill. When the cane is being crushed, he receives 1½ seers of *gur* and a handful of sugar-cane, and a *bind* full of cane juice daily.

When building a house or doing any other private work for a landowner, he receives his food daily.

At sowing time he accompanies the land-owner the first day, and receives one *topa* of wheat.

The potter. (*Kumhar*). At each harvest he receives exactly as much again as the blacksmith; at marriages the same as the blacksmith, or more or less according to the means of the cultivator. When he provides the cultivator with any vessels at his house, he gets some grain.

The day a sugar mill is started he receives two *tinds* of cane juice, and the day mill stops the same, also $\frac{1}{2}$ seer of *gur* daily. At sowing time if he conveys the seed to the field on his own head or his donkey, he gets one *topa*.

At the time of cutting the crops, if he provides the reapers with water-vessels and cups, he receives one bundle, or one third of a sheaf of that crop.

The barber. At each harvest he receives from each threshing floor a sheaf, and grain in an indefinite quantity, according to the means of the owner. On the last day of the working of the sugar mill, he receives four *tinds* of cane juice, and two seers of *gur* from each of his employers.

He receives other presents on the happening of domestic occurrences, but they are not fixed, and depend upon the means of the parties. When sent on any business by a land owner, he receives his food, and when accompanying him to any marriage or funeral, he receives some presents from the house he goes to.

The washerman. He receives at each harvest the same as the barber, and besides that at

marriages and funerals customary presents according to the circumstances of the husbandmen. If he goes to any house to mend clothes, he receives his food, and if he accompanies any land-owner to a marriage or funeral, he receives such presents from the house he goes to.

The Sweeper. Sweepers are of two kinds, the *Athari* and the *Sepi*. The *Athari* is a domestic servant always in attendance upon the husbandman, a man of all work, he has to carry manure and plough, he has to provide the untanned leather for harnessing bullocks, also winnowing baskets and leather sieves.

The *Sepi*, who works for several families, works for each in turn, and twice a year, at harvest time, he has to provide the above-mentioned articles. Both *Athari* and *Sepi* have to plaster the houses of their masters.

The *Athari* receives 12 *topas* in the *mani* to 8 or 9 *mani* (maund); also food twice a day, and a blanket and shoes. When the crops are cut, he receives a bundle from each crop.

The *sepi* receives 1 *pa* of grain at each harvest, and a bundle of each crop. At the end of the hearing of the cotton crop, they are both entitled to one picking of the field, and at the closing of the mill, to the produce of one sugar boiling. They receive one third of every hide, and presents at marriages and deaths, according to the circumstances of the husbandman.

A *sepi* is entitled to his food when working for his master.

The Mochi. (Cobbler). At the spring harvest he gets two sheaves per plough and two *pai* of grain; at the autumn harvest, two sheaves and one *pai* of grain, also one cotton picking at the end of the season, one sugar-boiling of *gur*, and at the end of the sugar-crushing, four tuns of cane juice; also he gets presents at marriages, funerals and festivals, and $\frac{1}{2}$ of every hide.

The Mashli (Water-carrier). He receives one rupee half yearly, and if he provides water for the harvests, he gets one small sheaf out of crop; if for the threshing floor, he gets two *topas* of grain. For carrying the palanquin he gets Rs. 2 or 3 for each marriage.

Mirasi (Bard). He receives on ten or twelve different occasions between the betrothal and the marriage, presents of from eight annas to two rupees, and among the perquisites are the shawl or other valuable cloth used as the pall at the funeral of the better classes; also when the marriage procession leaves the house of the bride, the bridegroom distributes to all *mirasis* who collect from the neighbouring villages for the purpose, from one anna to one rupee each according to his means.

TABLES OF

Table of the average prices of agricultural produce comprised within the years

76

	Wheat			Barley		
	Md	Sr	Ch	Md	Sr	Ch
1844	0	22	11½	0	37	14
Lahore						
1845	0	22	14	0	32	13
Lahore	0	25	13½	0	30	7½
D G Khan						
1846	0	19	12	0	29	½
Lahore	0	14	7	0	17	4½
D G Khan						
1847	0	23	½	0	33	14½
Lahore	0	31	5	0	33	3
D G Khan						
1848	0	27	2½	0	38	3
Lahore	0	9	0	0	10	0
D G Khan						
1849	0	19	3	0	27	3½
Lahore						
1850	0	21	1½	0	39	0
Lahore						
1851	0	25	7	1	10	9
Cis Sutlej States	0	38	14	1	17	9
Trans Sutlej States	1	4	4½	2	0	4
Lahore Division	1	8	3½	1	34	11
Jhelum	1	21	2½	2	11	0
Multan	1	17	11½	1	3	3½
Leia	1	14	4	1	10	6
Peshawar						
Average	1	7	2	1	28	1½

PRICES

77

duce in the Divisions of the Punjab for the period
1844 and 1852 inclusive

Gram	Jowar			Gur			Cotton				
Md	Sr	Ch	Md	Sr	Ch	Md	Sr.	Ch	Md	Sr	Ch
..			0 29 9						0 14 2 $\frac{3}{4}$		
			0 33 3 $\frac{1}{2}$						0 14 1 $\frac{3}{4}$		
									0 13 1		
0 9 0						0 5 0					
0 25 4				
0 39 6			1 15 8			0 15 6 $\frac{3}{4}$			0 4 8		
0 27 7			1 12 0			0 17 0			0 4 2		
1 7 11			1 16 12			0 20 0			0 4 5 $\frac{1}{4}$		
0 37 15			1 23 5			0 16 2 $\frac{1}{4}$			0 3 14 $\frac{3}{4}$		
1 38 0			1 34 5			0 16 3 $\frac{3}{4}$			0 3 13		
1 11 16			1 13 5			0 13 8 $\frac{3}{4}$			0 3 12 $\frac{3}{4}$		
0 36 14			1 30 0			0 15 0			0 5 9 $\frac{1}{2}$		
1 5 9			1 20 12			0 16 2 $\frac{1}{2}$			0 4 4 $\frac{3}{4}$		

PRICES BEFORE 1861

1852 to the end

	Wheat.			Barley.		
	Md	St.	Ch.	Md	St.	Ch.
Cis-Sutluj States	0	30	3	1	2	2
Trans Sutluj States	0	39	9 $\frac{1}{2}$	1	13	8
Lahore Division	1	3	5 $\frac{1}{2}$	1	32	2 $\frac{1}{2}$
Jhelum "	1	12	5	1	32	8
Multan "	1	11	12	1	37	6
Leia "	1	12	10	1	29	10
Peshawar "	1	3	12	1	24	7
Average	1	4	13	1	24	7 $\frac{1}{2}$

* General Administration Report

of June.

Gram	Jowar.	Gur.	Cotton
Md. Sr. Ch.	Md. Sr. Ch.	Md. Sr. Ch.	Md. Sr. Ch.
0 36 3	0 37 7 $\frac{1}{2}$	0 15 1 $\frac{1}{2}$	0 5 4 $\frac{3}{4}$
0 38 6	1 8 6	0 13 0	0 4 11 $\frac{1}{2}$
1 3 8 $\frac{1}{2}$	1 1 9 $\frac{3}{4}$	0 18 3 $\frac{1}{2}$	0 4 4 $\frac{1}{2}$
1 9 7 $\frac{1}{2}$	1 25 1	0 14 5 $\frac{1}{2}$	0 4 14 $\frac{3}{4}$
1 14 3 $\frac{1}{2}$	1 24 1	0 14 10 $\frac{3}{4}$	0 4 4 $\frac{1}{2}$
1 14 8	1 15 1	0 14 7	0 4 6
0 35 5	1 15 15 $\frac{1}{2}$	0 8 6 $\frac{1}{2}$	0 3 6 $\frac{3}{4}$
1 4 8 $\frac{1}{2}$	1 12 8	0 14 0 $\frac{1}{2}$	0 4 7 $\frac{1}{2}$

of the Punjab, 1849-50 and 1850-51.

Taluk Palwal district Gurgaon

	Average for 10 years ending 1842			1853 58	1858 63	
	M	Sr	Ch	M	Sr	Ch
Raw cotton	0	15	14	0	17	8
Wheat	0	31	10	1	4	3
Gram	1	4	6	1	17	8
Jwar	1	4	2	1	15	8
Barley	1	4	14	1	24	15
Bejhar	1	4	8	1	20	14
Bajra	1	0	6	1	11	11

Assessment Report Palwal, 1875

Kotkhat Itaga, Simla district.

Seers per rupee.

		Unhusked rice.	Koda & Bathu.	Wheat.
1828	...	30	35	30
1856	...	28	34	28
1882	..	20	32	24

" Ghi now sells for $1\frac{1}{2}$ seers the rupee ; and in 1856 it is said to have sold at $2\frac{1}{2}$ seers. Cow and bullocks sell at from Rs. 8 to Rs. 16 each... ; and are said to have been worth just half this value thirty years ago,"

Kotguru Itaga, Simla district.

	1849	1883
	Rs.	Rs.
Plough bullock	...	5
Cow	..	5
Sheep	...	3
Ghi, seers per Re.	3	$1\frac{1}{2}$
Wheat, " "	35	28
Rice, unhusked, seers per Re.	40	24
Maize, " " "	47	36

Settlement Report, Simla District, 1881-82.

Mamdot Ilaga, district

	1841	1842	1843	1844	1845	1846	1847	1848	1849
	MS	MS	MS	MS	MS	MS	MS	MS	MS
Vegetables	4	65	05	03	02	02	04	03	03
Poppy	0	160	140	130	120	150	130	100	90
Pepper	0	160	180	150	140	160	140	120	160
Cotton	0	200	200	160	110	170	110	200	170
Ajwain	0	130	120	140	160	200	220	130	120
Dhania	0	120	120	100	100	130	80	70	100
Tobacco	0	200	300	200	180	250	220	180	200
Wheat	0	260	231	141	41	100	340	260	270
Rice	0	300	380	341	01	40	340	360	351
Gram	0	300	291	301	181	301	60	320	301
Makki	0	341	200	321	101	170	320	331	120
Jowar	0	211	230	321	121	140	360	251	100
Gojee	0	300	311	21	10	201	00	300	290
Sarsaf	0	320	331	00	321	120	300	321	121
Massar	0	320	301	301	202	01	120	340	321
Barley	1	51	40	341	161	301	61	00	341
Bajra	1	190	360	341	121	80	320	251	350
Sun	0	100	940	801	1	90	130	160	70
Til	0	180	160	160	200	231	161	150	200
Mash	0	240	80	320	131	00	120	320	180
Moth	0	211	210	321	121	101	110	261	40
Mung	0	220	320	220	12	360	130	180	340
Taramira	1	01	101	02	01	101	02	20	10
Kangri	2	01	351	121	221	111	321	121	201
China	2	122	11	221	35	02	221	311	201
Chital	1	00	380	320	301	01	302	01	100
Burra	1	41	51	301	151	251	40	340	301

Ferozpur.

	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	1860	1861	
	MS	MS	MS	MS	MS.	MS.	MS.	MS.	MS.	MS	MS	MS.	
4	03	04	02	03	03	03	04	03	02	04	03	0	
0	100	100	110	80	90	100	120	100	80	120	80	10	
0	100	120	140	120	100	120	140	80	100	120	80	10	
0	150	190	110	240	200	150	200	160	160	170	140	17	
0	160	130	200	100	90	150	160	180	150	140	180	14	
0	90	80	130	50	80	80	90	90	80	90	100	10	
0	200	100	160	170	180	200	180	170	160	300	180	19	
0	261	241	201	41	161	41	141	101	201	201	241	2	
0	301	01	100	350	371	51	01	30	360	381	51	0	
0	321	22	01	201	101	261	351	201	322	02	51	20	
0	251	301	202	101	121	152	02	52	101	301	201	12	
0	251	301	202	01	121	152	02	202	101	301	240	14	
0	310	301	201	101	201	81	202	141	301	272	01	10	
0	220	210	320	340	310	321	01	11	100	300	320	31	
0	321	52	61	301	301	202	01	242	02	0	...	1	10
0	381	42	191	201	311	112	01	352	02	152	211	20	
0	211	201	221	301	211	201	301	322	01	301	200	14	
0	90	130	130	140	120	130	100	120	140	100	120	10	
0	160	130	220	240	103	101	120	301	00	200	180	12	
0	250	360	371	100	231	01	161	01	301	21	40	13	
0	311	01	121	320	302	02	201	322	02	01	300	15	
0	260	300	350	300	211	51	321	101	301	41	80	12	
2	01	301	201	101	101	201	01	101	101	01	02	0	
1	121	141	200	160	380	261	01	161	21	211	21	11	
1	321	211	101	221	121	221	211	221	241	101	21	20	
0	321	21	41	102	01	101	281	202	01	202	02	0	
0	321	02	01	201	361	121	351	251	352	52	102	15	

PRICES BEFORE 1861

Prices current in Haripur
SEERS PER

	Tobacco	Wheat	Barley	Mustard	Raw sugar
1834	16	50	80	25	5
1835	14	50	70	22	6 ¹ ₄
1836	18	40	60	24	8
1837	14	16	25	23	10
1838	12	18	21	22	8 ¹ ₂
1839	12	21	28	20	7
1840	17	22	50	25	7
1841	12	30	60	24	6 ¹ ₂
1842	20	32	45	22	8
1843	18	40	70	20	9
1844	15	27 ¹ ₂	45	25	9
1845	14	30	50	27	7 ¹ ₂
1846	13	48	72	35	10
1847	12	30	42	26	9 ¹ ₂
1848	11	40	55	34	9 ¹ ₂
1849	11	40	60	33	9
1850	12	50	102	40	10
1851	14	76	125	41	11
1852	13	84	140	32	8
1853	11	40	72	29	9
1854	10	30	42	32	11
1855	12	39	60	30	13
1856	12	38	60	40	12 ¹ ₂
1857	16	41	70	48	12
1858	15	61	98	40	12
1859	12	65	95	48	12 ¹ ₂
1860	13	60	106	20	10
1861	11 ¹ ₂	20	33		

town (Hazara district).

RUPEES.

Turmeric	Rice.	Maize.	Bajra.	Mongard Mash.	Moth.	Cotton.	Til.
8	24	66	45	34	44	12	16
8	18	58	48	32	48	16	14
8	20	50	31	30	47	15	18
6	13	20	32	13	38	12	14
9	16	35	25	23	25	14	12
9	14	19	26	13	24	15	15
10	15	40	40	20	50	12	12
9	16	53	55 $\frac{1}{4}$	24	40	12	10
8	18	40	60	27	45	10	15
10	18	60	120	25	50	15	20
10	18 $\frac{1}{2}$	42	40	30	36	15	20
10	17 $\frac{1}{2}$	50	48	25	38	16	21
9	16 $\frac{1}{2}$	54	52	31	40	16	18
9	15	36	35	25	35	15	20
8	16	44	40	20	30	20	16
7 $\frac{1}{2}$	19	55	50	26	40	15	20
9	16	60	55	30	52	17 $\frac{1}{2}$	19
9	18	112	100	35	60	19	20
8 $\frac{1}{2}$	19	100	90	34	75	24	21
8 $\frac{1}{4}$	18	43	40	31	38	13	18
11	16	44	44	24	32	14	16
10	18	60	50	30	50	18	20
5	15	50	52	30	45	17	20 $\frac{1}{2}$
5	15	64	59	40	45	18	28
4 $\frac{1}{2}$	16	58	58	29	50	13	28
9	20	88	90	32	60	16	23
12	16	40	37	25	37	16 $\frac{1}{2}$	16
12 $\frac{1}{2}$	12 $\frac{1}{2}$	35	35	24	30	11	17

district, 1858-74.

JHELUM.

	At the end of Sikh rule.	1858.		1877.
		Rs. a. p.	Rs. a. p.	Rs. a. p.
Cow ...	10 0 0	16 0 0	16 0 0	
Female buffalo	30 0 0	50 0 0	50 0 0	
Bullock ..	25 0 0	40 0 0	55 0 0	
Sheep ..	0 12 0	1 0 0	1 0 0	
Milch goat ..	0 12 0	1 0 0	1 0 0	
Goat ..	1 8 0	2 0 0	2 0 0	
Ghi, seers per Re.	4	2½	1½	
Goat's hair, seers per Re.	20	12	7	
Sheep's wool, seers, per Re.	8	6	4	
Country cloth, yards per Re.	20	18	16	

<i>Haripur & Abbotabad</i>		<i>Manshera</i>		1870.	
Average price during 10 years ending 1853		Average price during 10 years ending 1853		1870.	
		Rs.	a	Rs.	a
10	8	21	8	11	8
—	—	0	0	0	0
Plough bullock	10	8	0	19	0
Female buffaloo	76	4	51	48	0
Cow	9	0	18	11	0
Sheep (r: m)	1	0	2	3	0
" (ewe)	0	12	0	2	0
Goat (male)	1	0	2	0	0
" (female)	1	2	0	1	2
Ghi, lbs. per rurree	7	3	10	2	0
				5	

Price of Bullocks.

Bullocks sold at the Sisra bullock fair.
(Rohtak district)

Year	Numbers sold	Total price.	Average price.
		Rs	Rs
1863	11,971	2,07,647	17
1864	26,188	4,83,439	18
1865	10,066	2,13,174	21
1866	21,953	5,22,408	24
1867	10,769	3,06,419	28
1868	11,775	2,80,758	24
1869	5,576	1,58,054	28
1870	13,854	3,90,362	28
1871	5,426	..	..
1872	4,885	..	..
1873	11,051	..	..
1874	10,787	2,09,807	19
1875	5,869	1,61,703	28
1876	8,093	1,95,482	24
1877	14,031	2,89,474	21
1878	11,398	2,98,371	26
1879	22,839	6,29,522	28
1880	18,541	4,97,027	27
1881	8,901	2,64,593	30
1882	19,210	4,41,717	23
Average, ...	12,659	3,26,468	25

The rise of Prices in India before the war and the Report of the Prices Enquiry Committee.

The year 1905 marks a new epoch in the history of Indian prices. Before 1905, while famine or scarcity raised prices, favourable monsoons lowered them. The rise in prices, thus, lasted for a short time. For example, the index number, which was 149 in 1869 and 123 in 1870 fell to 92 in 1871; it was 174 in 1878, but 96 in 1881 and 95 in 1882. It is for the first time in the quinquennium 1886-90 that we are unable to explain the high level of prices (the famine in Ganjam and the scarcity in Behar were only of local importance), and from 1890 to 1905 we notice that prices fall more slowly with the return of good seasons. For example, the index number did not fall below 114 in 1894, and in spite of the favourable monsoon conditions in 1902 and 1903, and the bumper crop of the following year, it was three points higher in 1904. Since 1905 the prices of food grains have risen almost continuously. Along with the prices of food grains those of almost all other articles have been rising since 1905.

Attention was called to the general rise of prices in India by an anonymous writer in the *Economic Journal* for March 1907. He condemned the Indian currency system as inelastic and tried to show that this inelasticity was the cause of the rise of prices —

"The conclusion therefore cannot be resisted that the floods of rupees entering the country in the busy season must, finding no employment thereafter, choke the circulation in the dull season and raise prices whilst each succeeding year the demand grows like a snowball falling down a slope."

In the Budget debate of March 1908 Mr. Gokhale drew attention to the rise of prices which he attributed to the heavy coinage of rupees by the Government of India, and pressed for the appointment of a committee to consider the whole question of the rise of prices. Writing in the *Journal of the Royal Statistical Society* for September 1909, Mr Fred J Atkinson, sometime Accountant General of the United Provinces, reached the same conclusion, that the question of a redundant currency was mixed up with the currency system of India and that the redundancy was due to the fact that the currency was not automatic.

The Government of India appointed a Committee for the investigation of the problem in 1910. The Committee submitted its report in 1914. Its chief conclusions are summarised below.

The Committee recognised that "up to 1905 the fluctuations in the prices of food-grains and

pulses depended largely on the agricultural conditions in India". But a sharp and rapid rise of prices began in 1905 which was not always wholly due to unfavourable agricultural conditions. "Taking India as a whole, the agricultural conditions were not seriously adverse either in 1905 or in 1906. Still these years appeared to have ushered in a new period in the history of Indian price levels, the predominant characteristic of which was the existence of famine prices without famine."*

It has been shown that prices rose in India to a greater extent than in European countries. In view of this fact the Committee considered it necessary to examine at length the probable causes of the rise of prices peculiar to India. The general causes of the rise of prices throughout the world were a shortage in the supply of, or an increase in the demand for, staple commodities in the world's markets, the increased gold supply from the world's mines; the development of credit, and destructive wars and the growth of armaments.

Causes of the rise of prices peculiar to India.

"One of the principal causes," says Mr Datta, "which has led to the rise in prices in India, is a shortage of supply, particularly in the case of food grains. By shortage of supply is meant not that the total production of the country has actually contracted as compared with the basic period (1890-94), but that production has not kept pace with the growth of internal consumption and external demand."†

* Report p. 32

† Report, p. 53

Mr. Datta then proceeds to discuss the probable causes of the shortage of supply.

Growth of cultivation not commensurate with the growth of population.

On page 58 of the Report Mr. Datta gives a table comparing the growth of population with that of production of food grains and the extension of cultivation, which is reproduced below:—

	Average of the quinquennium 1890-91 to 1894-95	Average of the quinquennium 1895-96 to 1899-1900.	Average of the quinquennium 1900-01 to 1904-05.	Average of the quinquennium 1905-06 to 1909-10.	1910-11.	1911-12.
Population	100	101.6	105.7	103.7	107.8	108.4
Total area under cultivation	100	98	103	108	108	106
Area under food grains	100	96	101	106	106	103
Production of food grains	100	98	105	113	113	109

"It may safely be concluded from the above," says Mr. Datta, "that population has increased by a larger percentage in the period under enquiry than either the total area under cultivation, the area under food grains or the total production of food grains; or in other words, the requirements of food grains for internal consumption have increased in a larger proportion than the total production of food grains'."

The table, however, does not show any very great disparity between the growth of population or internal demand and the growth of production, except in the quinquennium 1905-06 to 1909-10.

The exports of food grains from India (excluding Burma) to other countries were —

	Average of the quinquennium 1890-91 to 1894-95.	Average of the quinquennium 1895-96 to 1899-1900.	Average of the quinquennium 1900-01 to 1904-05	Average of the quinquennium 1905-06 to 1909-10.	1910-11.	1911-12.
In thousands of cwts ..	28,899	21,956	33,255	29,568	41,857	64,240
Index Numbers	100	76	115	102	145	222

*Ibid. p. 58.

On the whole Mr. Datta concludes that the demand, for both internal consumption and export, increased more rapidly than the food supply. The shortage of supply was greatest in the quinquennium 1905-09, hence the great rise in prices in that quinquennium.

Unseasonable rainfall.—Reference has already been made to the severe famines of 1896-97, 1899-00 and 1907-08. There was scarcity in particular parts of the country in 1891-92, 1905-06 and 1906-07.

It cannot be doubted that the rise in prices in particular years was aggravated by unfavourable agricultural conditions.

Substitution of non-food crops for food crops. The cultivation of non-food crops, jute, cotton and oil seeds grew steadily during the period 1890-1912. The area under food grains actually contracted in some parts of the country, while in others, its growth was retarded, with the result that there was a diminution in the food supply of the country.

Inferiority of new lands taken up for cultivation.

In the populous parts of the country all lands that were good had already been brought under cultivation and whatever new lands were taken up were necessarily of an inferior quality. The produce of these inferior lands cannot be so good as that of the richer soils, and consequently the addition of these poorer lands has diminished, to some extent, the average yield per acre for India as a whole.

Inefficient tillage.—In particular parts of the country, it is probable that the cultivation of land became less efficient than before on account of scarcity and dearness of labour and plough cattle, but Mr. Datta doubts "whether this had any appreciable effect on the total out-turn of the land."

Decrease in the productive power of the soil. Many people think that the productive power of the soil in India has decreased. The opinion of the majority of the experts quoted in the Report, however, is that there is no justification for this belief, and Mr. Datta concludes that on the whole, there was not much decrease during the years 1890-12.

Increased demand for commodities in India.—The general rise in prices, says Mr. Datta, is due in part to the increased demand for all kinds of commodities. The chief cause of the increase in demand is the rise in the standard of living amongst all classes of the population. "But, it is difficult to say," Mr. Datta says, "whether improvement is the cause or the effect of the higher level of prices. These two act and react upon each other."

Expansion of Communications.—On account of the great development of roads and railways the isolation of the Indian village has ceased and the whole of India has become one market for many classes of commodities. A deficiency in one part of India is made good by importation from other parts and prices throughout the country tend to rise. "The lowering of the direct and

indirect cost of transport in India itself and between the Indian ports and foreign countries," says Mr. Datta, "is another of the most important causes which have raised the general price level in India" * The prices in sea-port towns rise and fall in sympathy with prices in foreign countries, and the reduction in sea freights has made the connection between the Indian and foreign price levels still more intimate. The lowering of the cost of transportation within the country has tended to make prices in inland districts approximate more and more to those prevailing in sea port towns and central markets

Improvement in general monetary and banking facilities and an increase in credit —As compared with the average of 1890-94, the capital of banks in India, in 1911, increased 115 per cent; deposits 232 per cent, and Clearing House Returns 210 per cent, while business increased 122 per cent only. Credit, Mr. Datta concludes, "contributed to a certain extent to the rise in prices in India." The marginal summary reads—"Growth of credit —its considerable influence on prices"

Increase in the circulation of rupees —The circulation of rupees increased 64 per cent in 1912 as compared with the 122 per cent increase in business. Mr. Datta's general conclusion is that "the growth of the volume of currency (including notes) has not been incommensurate with the growth of business and other demands for currency and in the absence of any indications of a redundancy of rupees for any length of time, it is clear

that the rupee coinage of the Government of India could not have exercised any important influence on the level of prices." He also attempts to show that the coinage of rupees is compulsorily undertaken by the Government when the demand for rupees depletes the currency reserve; that the Government cannot force rupees into circulation, and that our currency system works quite automatically as it did previous to the closing of the mints to the coinage of silver.

Examination of the Report on the Rise of Prices

We have seen that, according to Mr. Datta, a comparative shortage of supply was one of the most important causes of the rise of prices in India before the war. The Government of India, however, do not accept this view. They point out, in the first place, that the commercial crops occupy a very small proportion of the total area under cultivation, and that in the country as a whole there has been no substitution of non-food crops for food crops. Secondly, they do not regard Mr. Datta's estimates of outturn as reliable. The area under cultivation, as we have seen, expanded more rapidly than the population, except during the quinquennium 1895-99 to 1899-00, while between the growth of population and the extension of food cultivation there was "an almost precise parallelism." They also point out that the area irrigated from State owned sources nearly doubled during 1899-1912. Lastly they agree with Mr. Datta that the export of food grains exercised a negligible influence on their prices. What is the explanation of the rise of

prices if it was not due to a comparative shortage of supply? The Government of India agree with Mr. Datta that the rise of prices during 1890-1912 was not the effect, but the cause of the increase in the circulation of rupees, and that the extended use of credit had "an important effect on prices." They, however, seem to attach more importance to world factors than to this or any other cause peculiar to India. From 1890 to 1905, "Prices rose or fell in the main in accordance with changes in the agricultural conditions from year to year." The causes of the rise of prices since 1905, "must be sought for in a different and independent group of circumstances."

To this view, however, it may be objected that if our price level rose under the influence of the rising price levels of foreign countries, it could not have risen to a greater extent than the latter. The rise in prices in Germany and the United States as Mr. Datta says, can be partly accounted for by their protective tariffs and the growth of industrial and commercial combinations in these countries. But how to account for the great rise in prices in India? There must be some cause or causes of a general nature, peculiar to India, which began to act on our price level after the year 1905. In no other way can the general rise of prices in India, which was greater than that in any other country, be explained.

The expansion of communications and the lowering of the cost of transportation in India and foreign countries is not the cause we are seeking. The increase in the facilities of communication and the lowering of sea freights un-

doubtedly linked our prices to the world prices more closely. They explain why our prices began to rise in sympathy with the world's prices—but they do not explain why our prices rose more rapidly and to a greater extent than prices in other countries.

The Influence of credit on prices in India.

The effect of the increase in the use of credit instruments on prices in India is thus summarised in the Government Resolution on the Report of the Prices Committee.—

"As indicated in paragraphs 214-218 of the Report, the paid up capital and reserve of the Presidency and major joint-stock, including exchange banks, rose from an average of about 26 crores in the five years 1890-94, to an average of 61 in the quinquennium 1905 to 1909, and of 88 in the years 1910 and 1911. The increase has been specially rapid since 1900. The deposits which in that year amounted to 31 crores, rose to 51 crores in 1905, 73 in 1909, 82 in 1910 and 85 in 1911. Again between 1890 and 1912 the value of the cheques cleared at the Clearing Houses in Calcutta, Bombay and Madras increased from 138 to 517 crores. There can be no doubt that, as observed by Mr. Datta, (page 83, paragraph 214, of the Report) the extended use of credit has had an important effect on prices."

For reasons explained below I find myself unable to accept this view.

In countries like England and the United States of America credit instruments are used in the great majority of transactions and credit

in these countries exercises an important influence on prices. About three-quarters of a century ago an attempt was made to determine the relative proportions of cash and credit payments in business transactions in England. The report of the banking house of one Mr. Slater, for the year 1857, showed that the percentages of receipts and payments were gold and silver coins less than 3 per cent., Bank of England notes 7 per cent. and credit instruments 90 per cent. In 1865 Sir John Lubbock read a paper before the Royal Statistical Society in which he gave the following classification of £ 19,000,000 paid over the counter of his bank by his London customers —

Cheques and bills	£ 18,395,000	(97 per cent)
Bank of England's notes,,	408,000	(2 per cent)
Notes of other Banks ,	79,000	(4 per cent)
Coins ,	118,000	(6 per cent)
<hr/>		
	£ 19,000,000	

As regards more recent times we have Mr. Hartley Withers' assurance that the currency that England's cheque paying banks create "settles the great majority of commercial and financial transactions and much of the retail traffic of daily life."*

As regards the United States of America, it is estimated that credit instruments are used, roughly, in 75 per cent. of the business transactions. Considering that credit instruments are used in the great majority of transactions in countries like England and the United States, it is not surprising that an appreciable increase or decrease

in the credit circulation in such countries has an important effect upon the level of prices.

But the case of India is different. Here cash, and not credit, is used in the great majority of transactions. Banking is in its infancy in India. The number of banks is small and the bank deposits as compared with the total volume of business transactions in India are infinitely small. Now the cheque is the most important of all credit instruments. When Irving Fisher and others talk about credit and its relation to prices, they use the word chiefly in the sense of 'checkable' deposits. But the extent to which cheques are used in India in making payments is very small. The use of cheques is limited to Calcutta, Bombay and Madras and other capital towns. It may also be pointed out that India being an agricultural country, a very large number of our transactions must consist in the purchase and sale of agricultural produce. It is well known that the Indian cultivator has a decided preference for coins, and that he looks even on currency notes with suspicion. It may be doubted whether payments are made to cultivators by cheques even in 5 per cent. of the transactions. Some evidence on the use of cheques in India was taken by the Chamberlain Commission, which may be quoted here. Mr. Henry Marshall Ross,* a witness, was of opinion that the use of cheques could be advantageously extended even in the Presidency towns. "It is very poor at present," he said. He was asked whether the use of cheques was likely to curtail the circulation of currency notes

* A Calcutta export merchant.

and whether it was probable that cheques would be used at all throughout the country beyond the Presidency towns. His reply was "not within any period I can look forward to myself. They will be confined to the Presidency towns' business."

Important evidence in this connection was given by another witness: *

Q. 4106 (Mr. Keynes). Can you tell us in what class of transactions you find it possible in your business to use cheques?—Speaking of my own business I use cheques practically in every case. No matter what the kind of payment, except for wages and salaries which I always pay in cash.

4108—If you are buying produce of an Indian trader, would you pay him by cheque?—Very rarely. He probably wants either currency notes or actual cash.

4109—Then these cheques which you mention are paid to English merchants?—That is so largely.

4110—And except when you are making payments to other English merchants you would not use cheques much?—No, broadly speaking I should not.

In a memorandum submitted by the same witness to the Commission, he had referred to the possibility of the use of cheques being gradually increased throughout the country. The Commission asked him whether he thought that would be a speedy process. The witness said "No". What he had in his mind more particularly was

* Sir Alexander McRobert, a woollen manufacturer.

the European Community using cheques more—"the native does not to any great extent use cheques for large amounts," he added.

Q. 4072. And it is not likely that he will?
"I do not think so for long time to come."

Enough has been said to show that cheques are used only to a very limited extent in India.

The amount of cheques cleared at the Clearing Houses at Calcutta, Bombay, and Madras, as compared with the average of the five years 1890-94, shows a great increase, it is 353 times as large, the amount of cheques cleared at Karachi increased from Rs. 179,00,000 to Rs. 11,60,00,000, that is, 548 per cent. But for our purposes it is important to know, in the first place, what proportion of the cheques cleared represented commercial as distinguished from banking operations, and secondly, what proportion the amount of cheques used in commercial transactions which passed through the Clearing Houses, bore to the total value of all commercial transactions. It is important not to confound banking operations with commercial transactions. Banks "daily receive and transfer many checks the sole function of whose receipt and transfer is to facilitate exchanges among banks or between banks and Clearing Houses—transfers which in no other way represent commercial transactions. Such transactions are part of the country's banking machinery and then *raison d'être* is found in the credit mechanism of exchange itself."* When the

* Money and Prices by Prof. E. W. Kemmerer, p. 112

amount of the cheques cleared increases from Rs. 79,00,000 to Rs. 11,60,00,000 it may be of course presumed that the amount of cheques used in commercial transactions has increased, but it will be wrong to suppose that it has increased 548 per cent.

Secondly, if the proportion of cheques used in commercial transactions to the total value of transactions was insignificant in the beginning, the effect upon prices may be inappreciable even if the amount of cheques increased 5, 6 or 10 times. It is not the amount of cheques but the proportion of the commercial transactions in which cheques are used to the total volume of business transactions that is important.

It may be useful to summarise our conclusions so far. We have seen that the expansion of communications and the lowering of the cost of transportation in India and between India and foreign countries do not explain the great rise of prices in India. Our prices, it has been argued, could not have risen to a greater extent than prices in other countries in the absence of causes peculiar to India tending to raise prices. Of these, to which great importance is attached by Mr. Datta, is the comparative shortage of supply, but there are good reasons for believing that during the whole period 1905-12, the growth of population was not much more rapid than the growth of food supply. The increase in the cost of production Mr. Datta regards as the effect rather than the cause of the rise of prices. The only other remaining causes peculiar to India which might have raised our prices are (1) an

increase in credit and (2) an increase in the volume of the rupee currency. Of these two, it has been shown, that the first could not have exercised any important influence on our prices. We have now to consider whether the rise of prices was in any measure due to the redundancy of currency. An attempt will be made to show that the question of the rise of prices in India is intimately connected with that of the nature of our currency system. A gold exchange system, in practice, does not work automatically, and it is for this reason that our rupee currency became redundant during the years 1905-12, and prices rose.

The official view is that the gold exchange system works automatically and that the currency cannot become redundant. Rupees are issued into circulation only to meet the demands of trade. Not a single rupee can be forced into circulation. In reply to Mr. Gokhale's suggestion that the rise of prices during 1904-07 was due to the over-issue of rupees, Sir E. Baker, the Finance Member said "The whole of the new coinage that we have undertaken during this period has been undertaken solely to meet the demands of trade. Not one single rupee has been added to the circulation except to enable us to meet those demands."

What would happen if the Government over-estimated the demand for rupees and over-coined? "Then what would happen would be that the superfluous rupees would lie in their various reserves, but not in actual circulation. You cannot force rupees into circulation," said the late Sir L. Abrahams of the India Office in the course of his evidence before the Chamberlain Commission.

Mr. Datta also says:—

"Rupees when required by the trade are ordinarily supplied in lieu of gold or Council bills from the currency reserve or the silver branch of the Gold Standard Reserve (now abolished). When the amount of rupees in the silver portion of the Paper Currency Reserve falls to the margin of safety, the Government of India recognise that the time is drawing near for the coining of new rupees. And when the percentage of the rupee reserve in the Currency to the circulation becomes very low, coining is compulsorily undertaken by Government."

So far as the addition of the rupees to the circulation is concerned, the only difference between the existing system and the system which existed before 1b93 is, that while in the one case rupees are issued in exchange for the imported gold and Council bills, in the other case they could be obtained directly by the minting of bullion at the option of its owner.

In a monetary system with an open mint, the currency decreases automatically when the rise of prices causes imports to increase and renders the export of gold or silver necessary. The circulation is thus reduced and prices fall. Under a gold exchange system an adverse balance of trade cannot be adjusted by the exportation of the token coins. The tokens must be converted into gold (or bills payable in gold) for that purpose. The Government of India have undertaken the obligation to do so, whenever the need arises. This is the outlet provided for the excess currency.

When Reverse bills are sold, the currency contracts and prices should fall. The surplus rupees do not go back into circulation until the trade demand for them revives. It is thus shown that our currency expands and contracts by an automatic process.

Against the view that our currency is automatic it may be urged that some of the causes, which tend to reduce prices by decreasing the volume of circulation under gold or silver monometallism, cease to work when the principal money of a country consists of token coins. When the rupee was a full value coin it was freely exported as bullion, it was melted down to make ornaments and it was also hoarded. The rupees in the hoards or in the form of ornaments represented the savings of the people. The rupees melted and hoarded formed a considerable proportion of the coinage. Mr. Atkinson estimates that from 1835 to 1862, 34½ per cent. of the coinage of 1835 (five years) and 1840 (twenty-two years) was melted down into ornaments, and that the rupee consumption of the 1862-92 coin for ornaments was 40 crores, which is about 20 per cent. of the total coinage of 1862-92. As to rupees hoarded in the period 1862-92, taking 24 per cent. of the coinage to have been hoarded, the amount would be 49 crores of rupees, equal to 157 lakhs a year.* Hoarding and melting, apart from export, accounted for about 45 to 50 per cent. of the coinage.

When the rupee became a token coin, the melting of rupees ceased altogether, while for the

*Journal of the Royal Statistical Society, Vol LXXII, p 547

purposes of hoarding, gold was preferred. Now in dealing with the question of inflation we cannot regard it as a matter of indifference whether people hoard rupees or buy gold with them for hoarding purposes, or whether they melt down rupees for making ornaments or buy silver with them for that purpose. When the rupees are melted down or hoarded, the amount of money in circulation is reduced, but when gold or silver is purchased with the same rupees, the latter fall into the channel of circulation. In the one case prices tend to fall, in the other case they must tend to rise. It cannot be doubted that the hoarding and the melting of rupees before 1893 prevented prices from rising too rapidly by reducing the volume of the currency, and that the change in the character of the rupee, from a full value coin to a token coin, by discouraging hoarding and making it unprofitable to melt rupees, contributed in some measure to the inflation of the rupee currency. It really proves nothing to say, as Mr. Datta does, that the "average annual coinage during the eighteen years that have elapsed since the closing of the mints has been much less than in the corresponding period preceding that date"** The averages are 7.51 lakhs for the period 1874-75 to 1893-94, and 5.66 lakhs for the period 1893-94 to 1911-12. In the decade following the closing of the mints the average net coinage was small, due to a deliberate restriction of the coinage to force up exchange. If we compare the average coinage in the decade preceding the closing of the mints

with that in the ten years ending 1912-13 (the great rise in our prices took place in this period), we find that the average was Rs. 805 lakhs in the earlier period and Rs. 917 lakhs in the latter. Further, in comparing such averages we should not forget that before the closing of the mints 45 to 50 per cent. of the coinage was melted and hoarded.

As regards the issue of new rupees into circulation, it must be admitted that they can be issued only in response to the needs of trade. But it may be pointed out that the rupee is a note printed on silver and for purposes of internal circulation it is *inconvertible*. During the period of the Bank Restriction in England, the Bank of England notes depreciated in spite of the fact that the Directors had made advances in notes in response to legitimate trade demands, and at a high rate of discount "They thought in this way the demands for currency were fairly indicated," says Professor Nicholson "and that, therefore, there could be no depreciation. But they forgot the cumulative effect. None of the notes being withdrawn or sent abroad, in time the quantity became too great, prices rose and *inter alia*, the price of gold."*

The Bullion Committee thus described the causes of the inflation—

"In the first instance when the advance is made by notes paid in discount of a bill, it is undoubtedly so much capital, so much power of making purchases placed in the hands of a merchant who receives the notes, and if these

hands are safe, the operation is, so far, and in this, its first step, useful and productive to the public. But as soon as the notes are exchanged by him for some other article which is capital, they fall into the channel of circulation as so much circulating medium and form an addition to the mass of currency. The necessary effect of every such addition to the mass is to diminish the relative value of any given portion of that mass in exchange for commodities."

But it may be objected that rupees are not issued into circulation by discounting bills. The effect upon the circulation and the level of prices, however, is the same whether an addition is made to the currency by discounting bills, or by the conversion of gold, or Council bills imported into rupees. It might also be objected that the Bank of England notes were inconveni-ble while the rupee is partially convertible. The Government convert rupees into gold or sterling bills when remittances have to be made to foreign countries in settlement of an adverse balance of trade. Remittances "can be made from India to the other countries in adjustment of the trade balance as freely as before, and when such remittances are made on a large scale the inevitable effect will be a contraction of the circulation of rupees." But it may be long before the need for making such remittances on a large scale arises. If the foreign demand for a country's exports was weak so that the slightest rise in prices caused the demand to fall off and turned the balance of trade against the country, the volume of currency would be quickly reduced by the withdrawal of rupees from the circulation in order to make foreign

remittances. But if the foreign demand is strong—the exports, for example, consisting of raw materials of which the country in question has a monopoly—the level of prices will have to rise to a great height before a favourable balance of trade is turned into an unfavourable balance of trade and the necessity for making heavy foreign remittances arises. Now, as a matter of fact, the balance of trade is generally in India's favour. From 1898 to August 1912, the balance of trade was unfavourable to India for a short time in 1907-08, when 9 crores of rupees were withdrawn from circulation. The effect of the contraction of the circulation upon prices was negligible. Prices had risen sharply on account of famine in 1908, with the return of normal conditions they returned to the old levels. The general index number was 133 in 1907, 143 in 1908, 134 in 1909, 132 in 1910, 134 again in 1911 and 141 in 1912. There is, thus, not much evidence of a fall of prices which might be attributed to the withdrawal of 9 crores from circulation.*

It may be here emphasised that economic forces which tend to contract the circulation and lower prices never work so smoothly and automatically as is generally supposed. The classical theory of the distribution of precious metals through changes in prices has certainly the merit of simplicity. "The amount of money needed by a country", says General Walker, "is that amount which will keep its prices (after

* The active circulation of rupees and currency notes is estimated to be 190 crores in 1907 and 181 crores in 1908 Report on the Rise of prices, p. 92

allowance is made for the cost of transporting goods) at a level with those of countries with which it has commercial relations." This is the old Ricardian doctrine. It contains an important element of truth, but it ignores economic friction. It is generally recognized among economists that this theory, stated baldly and without qualification as Ricardo stated it, is not true. Trade balances are not ordinarily adjusted by the exportation of specie. Very often the necessity for shipping gold or importing gold is avoided by readjustment in the prices of exports and imports; a number of devices are also employed for preventing or lessening the flow ^{of} gold from a country with an adverse balance. ^{Indeed,} the export of gold from a country, when it ^{does} take place, may make such an infinitesimally slight ^{tiny} addition to the world's gold circulation, that the effect upon the world's price level may be nil. The last point is important. Mr. Shirras has no hesitation in saying that the sale of Reverse bills in 1907-08 had the effect of contracting the circulation in India, which lowered Indian prices, thereby causing imports to decrease and exports to increase. His argument, if anything, means that, as a result of the export of gold from India, world prices rose while Indian prices fell, so that India became a good market to buy in and a bad market to sell in. The suggestion that the withdrawal of 9 crores from circulation in India had that effect seems to be wholly unwarranted.

The Ricardian theory, as Professor Kinley says, is "too simple and sweeping." And if the flow of gold under the influence of changes in prices is

not immediate and complete, it is possible that a country "may for a time hold its supply of money at a level relatively higher than that of the world at large, and during that time many consequences of great importance to individuals and classes may occur because of the difference in level."*

According to the classical theory gold is imported or exported, and the amount of the circulating medium increases or decreases, according as the level of prices in a country is lower or higher than the world's price level. But it is easy to show that the inflow and outflow of gold has generally no appreciable effect on the export and import of goods. Apologising for introducing evidence on so simple a point, Laughlin shows that while prices in the United States were rising from 1878 to 1883, instead of a falling off in the value of exports there was an advance. "Indeed, instead of a restriction of exports because of the imports of gold there was a heavy excess of exports over imports of goods during the whole period."† In the case of our own country the average annual imports of treasure (net) in the quinquennium 1909-10 to 1913-14 amounted to £ 25,919,000 as compared with £ 17,503,000 for the quinquennium 1904-05 to 1908-09 and yet prices were higher in the former quinquennium.

It thus appears that if a country's currency consists of token coins which are convertible into gold only for the payment of international

* "Money" by Kinley, p. 95

† Principles of Money p. 374

indebtedness, and if the balance of trade is in the country's favour, so that the supply of tokens constantly increases, in time the currency may become redundant. In the long run, of course, the rise of prices would lead to the exportation of the excess currency and prices must fall, but the long run may prove to be a very long run indeed. And in the meantime, because of the depreciation of money, important consequences may occur to various classes of the community.

the Exchange and the Level of Prices.

One of the arguments used by Mr. Datta in support of his view that the rise of prices was not due to the redundancy of currency is that from 1898 to 1912, the exchange value of the rupee in terms of gold never fell below 1s. 4d. (except in 1908-09), from which he infers that the currency never became inflated (except in part of the year 1908-09). He says —

"Throughout the period under enquiry there were also no signs of a redundancy of rupees for any length of time as it would have led to the export of gold in the form of currency or bullion and a continued fall in exchange. The statement below shows the imports and exports (less the quantity of gold produced in India) of gold and rates of exchange. It will appear that since the stability of the gold value of rupee was established, exchange fell below the fixed ratio of 16d. per rupee only in the year 1908-09, and there were signs of redundancy of rupees for a part of that year, when the export trade was stagnant and there was a financial crisis in America, but the Government of India were, by selling bills on

London, able to immediately arrest the downward course of the exchange, and the imports of gold more than recovered in the next year. Except, therefore, for only a portion of a year, there have been no indications of a redundancy of coinage in India."†

It cannot, of course, be denied that there is an intimate connection between the value of money and exchange. The depreciation of currency must effect the exchange. This is one of the truths established by the Bullion Committee. If, under a paper or silver currency, the market price of gold exceeds the mint price and the exchange falls beyond the cost of transmission of specie, then the common cause of the premium on gold and the fall in exchange is the depreciation of money. The exchange, more fully, is subject to two sets of influences, to fluctuations of limited extent caused by changes in the ratio of the supply of bills to the demand for bills, and secondly, to fluctuations of almost unlimited extent caused by changes in the value of money. The second set of influences affect the exchange far more powerfully than the first. If money depreciated 50 per cent. exchange would also fall 50 per cent. The fall in exchange is thus a sign and the measure of the depreciation of money. Before the closing of the mints to the coinage of silver our exchange was subject to both kinds of influences. The depreciation of the rupee caused a heavy fall in the exchange. The bullion value of the rupee governed the exchange—or, in other words, the exchange depended on the market price of silver. But the rupee

* Report p. 94

became a token coin in 1893. Its value was artificially fixed at 1s. 4d. Our exchange ceased to be affected by the second set of influences, i.e., the fluctuations caused by changes in the value of the currency. It rose or fell within the specie points as the supply of foreign bills happened to be greater or less than the demand. As long as the Government had plenty of reserves abroad against which they were able and willing to sell sterling bills whenever the need arose, the exchange could not fall. The rupee in terms of gold could not depreciate. But no means could be devised to prevent the depreciation of the rupee in terms of commodities. And therefore we have the strange phenomenon that while the exchange remained stable, the rupee continuously and heavily depreciated in terms of commodities in India.

In 1908-09 the exchange fell below 1s. 4d. per rupee, and according to Mr. Datta "there were signs of redundancy of rupees for a part of that year." But the redundancy of currency is not regarded as one of the causes of the crisis in exchange of 1907-08. The crisis in America and the heavy decline in Indian exports sufficiently explain the situation which arose in India in the latter part of 1907. The number of importers, for the time being, being greater than the number of exporters, the supply of foreign bills was less than the demand and exchange fell. "It is when the holder of rupees is looking about for sterling in order to pay his debts to his creditors in Manchester that a fall in exchange occurs."* The

* Sir Lionel Abrahams in his evidence before the Chamberlain Commission

difficulty was increased by the policy adopted by the Government in regard to gold at the beginning of the crisis. It is said that when the crisis came some one asked for £10,000 of gold from the Accountant General of Bombay, and the Accountant General said, "Why do you ask for it?" Sir Edward Baker, the Finance Member, was wired to and he said "Gold is not for export, it is only for internal purposes." If the Government had given gold freely for export, or which is the same thing, declared their intention of selling sterling drafts on London freely as soon as the exchange began to fall, the exchange would not have fallen below specie point, whether the currency was redundant or not. And when they actually did announce their intention of selling Reverse Councils, the fall in exchange was arrested. This point deserves emphasis, for under a gold exchange system, that is a system under which the rate of exchange is controlled by Government, the stability of exchange is no argument against the existence of a redundancy of currency, nor is a temporary fall in exchange a necessary consequence of inflation. There is, in fact, very little connection between the volume of a token currency and a 'managed' exchange. Interesting evidence on this point was given by Sir Lionel Abrahams of the India Office before the Chamberlain Commission.—

"I think the connection between the volume of token coinage and the stability of exchange is very remote, as indeed is shown by the fact that now at this moment the token coinage is of greater volume than ever before, and I think one

might almost say that exchange is more stable than it ever has been. According to my view the stability of exchange depends on trade conditions, and the trade conditions may be affected, I admit, but are slowly and indirectly affected, if at all, by changes in the volume of currency".

Important changes in the volume of currency would affect exchange in the long run. If the currency expands, other things being equal, prices must rise. The rise of prices encourages importers, discourages exporters and tends to turn the balance of trade against the country. Exchange therefore falls. A contraction of the currency, similarly, lowers the level of prices and tends to raise the exchange value of the token currency, other things being equal. But other things are never equal, and it was never more true than in the present case that long period results do not exist, their universe is the abstract.

It has been thus shown that during the period 1898-1912 the movements of exchange and prices were entirely unconnected with each other.

The Increase in the Rupee Circulation as compared with the Growth of Business, 1890-1911

Mr. Datta's conclusion that the increase in the quantity of rupees in circulation had no important effect upon the level of prices is based upon his statistics of the growth of business. These statistics show that in 1911 business increased 122 per cent. and that the growth was specially marked from 1904. More currency was therefore required to satisfy the growing needs of

trade. Mr. Datta says : "In the absence, therefore, of any marked increase in the rapidity of circulation of credit—and we have had no evidence of any remarkable change in the rate during the last two decades—the demands of business would necessitate a corresponding increase in the volume of currency and credit. But the volume of rupees and currency notes in actual circulation has increased only 60 per cent. as compared with the 120 per cent. increase in the growth of business."* Considering that the supply of rupees increased much less rapidly than the demand, prices should have fallen. The development of credit, however, was much more rapid than the growth of business, and the growth of credit, according to Mr. Datta, had an important effect on the level of prices.

The effect of credit upon prices in India has already been discussed. It remains to consider whether the increase in the volume of money, apart from credit, was less rapid than the growth of business. The following points may be noted :—

1. Mr. Datta's estimate of our rupee circulation does not include the circulation of sovereigns. But the sovereigns formed part of our circulation before the war and their absorption into the currency was increasing every year, and for that reason they should have been included in the estimate of the active circulation in considering its effect upon prices.

2. Mr. Datta neglected the circulation of small silver coins without giving any reasons. The fractional silver currency is used daily in retail transactions of all kinds. The rapidity of

circulation of these coins is also great. Mr. Atkinson regarded the circulation of small silver coins as an important item in India. "The circumstances of India are such, wages being comparatively so low that the circulation of small silver coins might, at any time, if issued in too large or too small quantities, assist in inflating or contracting the currency, and consequently in estimating the total active monetary circulation, the circulation of small silver coins should be included." Four half crowns according to Dr. Marshall affect prices in the same way as a half sovereign. (Gold and Silver Commission, Q. 9629). Similarly two half rupees or four quarter rupees have the same effect upon prices as a whole rupee.

3. According to the Prices Committee there was not "any marked increase in the rapidity of currency and credit" during the period under enquiry. The rapidity of circulation depends upon certain technical conditions; it increases with the development of the means of transportation and communication, increasing density of population and concentration of the population in towns, the growth of prosperity and the growth of business confidence. All these causes, as shown by Mr. Datta himself, were at work during the period under enquiry, and it is impossible to believe that the rapidity of circulation was not affected. The increase in the rapidity of circulation was remarkable enough to attract Dr. Marshall's attention, who referred to it in his evidence before the Fowler Committee (Q. 11,160).

4. It may be doubted whether the general index number of the growth of business of the Prices Committee is reliable. The general index number is an unweighted arithmetic average of the index numbers of the value of imports and exports of merchandise and treasure (excluding Government stores); tonnage entered and cleared with cargo, imports and exports, coasting trade; passengers and freights carried by railways; Treasury and Presidency Port Trust and municipal transactions; receipts and payments; capital of joint-stock companies registered in India, and consumption of rice, wheat, jute, cotton and coal.

These indicators are not of equal value for measuring the growth of business; some of them are, at best, indirect indices of trade. The increase in the number of passengers and the amount of freight carried by railways may well have been due to the expansion of the railway system and not to any proportionate increase in production; the growth of capital of joint-stock companies is also used as an index of credit. Again, treasure should not have been included in the statistics of imports and exports, for our concern is with goods only, and quantities of imports and exports should have been taken instead of values. The values of exports and imports may increase in a certain proportion, not because the export and import trade has increased in that proportion, but because prices have risen. As a matter of fact, the index number of imports, calculated at the average prices of the respective articles for 1890-94 rose from 99 in 1890 to 174

in 1911, and that of exports from 98 to 162 the average index number of foreign trade thus rising from 98.5 to 168 while Mr Datta's index number rises from 99 in 1890 to 220 in 1911.

This part of Mr Datta's work is obviously of the roughest possible nature but he has not realised the weakness underlying it. It has been shown that Mr Datta under estimated the increase in the supply of money by not including in his estimate the circulation of sovereigns and the fractional silver currency and by ignoring the probable increase in the velocity of circulation. As regards the growth of business there is a strong probability that the index number 222 for 1911 is an over estimate rather than an under estimate in view of the fact that in four cases Mr Datta uses increase in value as an index of the growth of trade and that he assigns the same importance to direct indices of trade and indirect indices such as passengers carried by railways, freight carried by railways, capital of joint stock companies and post office transactions. It may be pointed out that in each of these cases the increase in 1911 was greater than the average for growth of business —

Passengers carried by railways	268
Freight ,	311
Post Office transactions	261
Capital of joint stock companies	264
General index number of growth of business	222

To determine whether the rise of prices in India during 1904-12 was in any measure due to

inflation we may try a new method.* Suppose, we take two periods during which prices were generally at the same level. Then if the amount of the currency had increased during the period, it may be assumed that the increase was necessitated by the growth of business, for if it had been greater or less than the requirements of trade, other things being equal, prices would have risen in the one case and fallen in the other. The rate of expansion of the currency, thus, is that required to keep prices steady when business is growing in a certain proportion. Now, if during a period of rising prices it was found that the rate of the growth of business had not changed while the rate of the expansion of currency, consisting as before of rupees and notes, had become more rapid, the conclusion would be drawn that the rise of prices was due to increase in the currency, provided that there was no decrease in credit circulation and no decrease in the velocity of circulation of money or credit during the period. For example, prices in 1896 and 1904 were at the same level in India,† but the rupee circulation (including notes) increased from 127 crores in 1896 to 152 crores in 1904, the annual rate of increase being 2.273 per cent. As prices in 1896 and 1904 were at the same level, it may be assumed that the expansion of the rupee circulation at the rate of 2.273 per cent. annually was just sufficient for the growing needs of trade. In the next period,

* See Mr. Hooker's paper in the Journal of the Royal Statistical Society for December, 1911.

† The Index Number of rupee prices stood at 106 in both years (Datta's Report p. 29).

1904-12 the rupee circulation increased from 152 crores to 214 crores, the annual rate of expansion being 4.375 per cent. *Other things being equal*, the amount of rupees and notes required in 1912 to keep the price level steady was 182 crores, i.e., in 1912 the excess of our actual supply of rupees over our normal requirements was 32 crores of rupees. But did other things remain equal?

1. As regards the growth of business, the rate of growth, if anything, was slower between 1904-12 than in the first period. This is only natural, considering that the volume of trade was larger in the second period than in the first. Taking imports and exports in the inland and foreign trade as our guide, we find that the index number of inland trade rose from 107 in 1896 to 195 in 1904 and 234 in 1911; the index number of the value of exports from India (prices calculated at the average of 1890-94) rose from 94 in 1896-97 to 146 in 1904-05 and 160 in 1911-21; that of imports rose from 108 in 1896-97 to 140 in 1904-05 and 174 in 1911-12.

2. The rapidity of circulation, as I have tried to show above, was increasing during the whole period. That being so, the rupees and notes required in 1912 to maintain prices at the level of 1904 was probably less than 182 crores, and the excess was probably greater than 32 crores.

3. The influence of credit upon prices in India is negligible, but if, as Mr. Datta argues, the influence of credit upon prices in India is important, the amount of rupees and notes sufficient for the "normal requirements" of trade

in 1912 was probably less than Rs 182 crores for according to Mr Batta's statistics the development of credit between 1904-12 was much more rapid than between 1896-04 the index number rising from 118 in 1896 to 171 in 1904 and 286 in 1911 (average of 1890-94=100)

4 The following table shows the net issues of $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ rupee and the absorption of sovereigns in India. Complete figures for the net issues of small silver coins in 1910-11 and 1911-12 could not be obtained

Year	Net issues of $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ rupee in thousands of rupees	Absorption of sovereigns in lakhs of rupees
1896-97	+2 832	
1897-98	-258	
1898-99	+1 444	
1899-00	+3 812	
1900-01	-2,187	314
1901-02	-54	147
1902-03	+670	323
1903-04	+2 359	492
1904-05	+2 308	440
1905-06	+3 212	570
1906-07	+4 221	766
1907-08	+2 219	1 112
1908-09	-696	515
1909-10	+1 376	431
1910-11		1 215
1911-12		1 333

The circulation of sovereigns and small silver coins is not known, but the table makes it clear that the circulation of both was much larger during the 8 years succeeding 1903-04 than during the preceding 8 years.

Our argument shows that the rise of prices in India during 1904-12 was due to the inflation of the rupee currency.

Effects of the Rise of Prices.*

It is generally supposed that the rise in the prices of agricultural produce is beneficial to the country as a whole. As the profits of agriculture increase, the prosperity of the agricultural classes increases, and since the agricultural classes form a very considerable proportion of our total population, it may be said that the prosperity of the country as a whole increases. This view of the matter is accepted by Mr. Datta who criticizes the belief "that the rise of prices is detrimental to the interests of the country as a whole." Popular opinion in India, says Mr. Datta, is the opinion of a very small section of the population—the educated classes. The educated classes consist of landlords, capitalists, employees in Government or private service with fixed salaries, and members of the learned professions dependent for their income on customary fees. Now it is a well ascertained fact that the rise of prices does not affect the different classes of the population in the same way. Those classes whose income is fixed, but whose expenditure is variable, are injured by the rise of prices. But those whose incomes rise faster than the prices of commodities gain by the

rise of prices. In considering the effects of the rise of prices on general welfare we must, therefore, take into account the numerical strength of those classes whose incomes are variable and of those whose incomes are fixed. Persons dependent upon land for their income form 60 per cent. of the total population in India, agricultural labourers 13.3 per cent.; industrial and commercial classes 16.1 per cent., general labourers (not agricultural) 2.3 per cent.; professional classes 1.0 per cent.; public servants 1.2 per cent.; domestic servants 1.5 per cent. and other occupations 2.0 per cent. Including agricultural labourers, 73.3 per cent., of the population are dependent upon land for their subsistence. Hence Mr. Datta's conclusion that "the prosperity of India depends largely on the prosperity of those who are dependent on agriculture for their subsistence and not so much on that of the professional classes and public and private servants who form only a microscopic minority of the population"†

Now it cannot be denied that large farmers have profited greatly on account of the rise of prices. They have enough of land. They produce not only for their own consumption but for the market. Those who have a surplus to dispose of are naturally pleased when they can sell it at a high price. The higher the price, the greater is their profit.

A general rise of prices, however, is not an unmixed blessing to any farmer, be he a large or a small farmer. The farmer has no need to buy

† Report p. 40

food-stuffs, milk or ghee, or fodder for cattle, but he spends a certain amount of money every year on iron, cloth, shoes and other miscellaneous articles. When all prices rise, his expenditure must increase. To this extent he is injured by the rise of prices.

A large farmer stands to gain by the rise in the prices of agricultural produce. But the great majority of farmers have not enough of land. By this it is meant that their holdings are very small and that what they produce barely suffices for their own consumption. I have questioned a number of small farmers on this point, and cross-examined them very closely, but the replies that I got were of the same nature. A typical answer was that of Hassu, Arain, aged 45 of the village Rania in Moga. *Tabsil main bechan tan mehngiyai di saad ae, dane khane joge nahin honde, sanu mehngiyai da ki eataad ae*¹. Another farmer said *ehhote zamindaran da tava mundha hi rehnda hai*².

Other replies received were *masan logan de dhidh pure honde hain Massan dang tapda hai Taklif tuhiari hai, tuu jande ho Vahi karke kakh nahin bachda Har sal das bis chark jande hain Zindgi masan baar karde hain. Har wakt inhan nun fikr hi loge rehnde hain*³.

1. The rise of prices would mean something to me if I had anything to sell. What I produce is barely sufficient for my own consumption. The rise of prices means nothing to me.

2. Small farmers find it difficult to make the two ends meet.

3. It is with great difficulty that people manage to live. What we have barely suffices for a single meal. We suffer much as you know. Tilling the soil pays little. Our indebtedness increases every year. They (small farmers) are always full of cares.

Almost every small farmer is in debt. It should not be supposed that extravagance on the occasion of a marriage or a funeral is the only cause of his indebtedness. Not infrequently he borrows to pay the m'amlा to the Sarkar. M'amlा le ke da da hai, har bar m'amlा le lu danda hai,⁴ said Hassu whose debts amounted to 120 rupees. The rate of interest that a small farmer has to pay is, in most cases, exorbitant. A large farmer is able to borrow on easier terms because of the better security he can offer for the loan. Shah sud hasb hassat garra orranda ke hoi hoi hai,⁵ said a village official.

The small farmer has very little to gain by the rise in the prices of agricultural produce. The farmer is a gainer only when he produces more than what is sufficient for his own requirements; he is a loser when he produces less than that quantity. When his production is barely sufficient for his consumption, it is a matter of indifference to him whether corn is selling at a high or low price. It is also important to remember that the number of large farmers in India is comparatively small. The average size of the holding is small and it tends to grow smaller. In the Ferozepore and Hoshiarpur districts large farmers, it is estimated, form about 15 to 20 per cent. of the land-owning classes. In any case they form a minority of the agricultural population. The fact that the rise in the price of foodstuffs enriches a minority of the land-

4. We have to borrow in order to pay the land revenue, whenever we have to pay the land revenue we have to borrow

5. The rate of interest varies according to the means of the borrower

owners deserves emphasis. It is wrong to think that the rise in prices benefits the agricultural classes as a whole. It only makes the rich farmer still richer.

As for the agricultural labourer, the price of food would be a matter of indifference to him if he was always paid in kind and his share of the produce was sufficient for his consumption throughout the year. But with the rise in the prices of all agricultural produce the tendency to substitute cash payments for grain payments has increased. This is made clear by the Report on the First Regular Wages Survey of the Punjab taken in December, 1912 —

"The following table compares the percentage of villages reporting cash and grain wages paid to unskilled labourers in 1909 and 1912 —

Purely cash.	Cash with grain or other sup- plement		Purely grain, 3
	1909	1912	
49	48	40	2
58			

"In Hissar, Gurgaon, Gujrat, Jhelum, Rawalpindi, Mianwali and Muzaffargarh the few grain wages reported in 1909 have disappeared, while in Gurdaspur, the percentage of villages in which purely grain wages are paid has fallen from 21 to 2. In Hissar, Gurgaon, Jhelum and Rawalpindi there was even in 1909 no general custom of paying grain wages, and the few cases then reported were due to the excellence of the autumn harvest. The decrease in the other districts is

due to the growing tendency to substitute cash for grain wages

Where wages are paid partly in cash and partly in grain the agricultural labourer like his fellow worker the town labourer, must buy corn in the market to supplement his grain wages. Where wages are paid purely in cash the agricultural labourer is affected by the rise in the prices of agricultural produce precisely in the same way as any non agricultural worker.

The rise in the price of food therefore seriously affects the agricultural labourer. It diminishes the purchasing power of his income. As the price of food rises he must spend an increasing proportion of his income on the necessaries of existence and a decreasing proportion on other commodities. Wages as a rule do not rise as rapidly as prices and therefore every increase in the cost of living lowers the standard of comfort of the agricultural labourer. He does not share in the prosperity of the great landlords though he helps them in filling their coffers with gold and silver. If wages remain stationary he is actually injured by the rise of prices. If the rise in wages is equal to the rise in prices he is neither a gainer nor a loser—but this is rarely the case.

Our agricultural labourers live very near the margin of starvation. Their daily earnings are so small that one wonders how they can live at all. The Wages Survey of the Punjab made in December 1912 shows that out of a total of 1617 villages for which reports were received in 398 or

25 per cent. of the villages the rate of daily wages paid to agricultural labourers, including value of payments in kind, was 4 annas or less; in 773 or 48 per cent. of the villages the rate varied between 4 annas and 6 annas; in 379 or 23 per cent. of the villages it varied between 6 annas and 8 annas, and in 67 or only 4 per cent. of the villages it was higher than 8 annas. The agricultural labourers do not seem to have profited much by the rise of prices.

The Best Index of Prosperity.*

The annual income of India has considerably increased during the last fifteen or twenty years. Dr. Marshall defines a country's income or the national dividend as the "the net aggregate of commodities and capital, material and immaterial, including services, produced annually by the labour of the country acting upon its natural resources." Mr. Datta points out that "in recent years there has taken place with the development of the resources of the country and the growth of enterprise on the part of the community as a whole, a very considerable increase in this annual income."† How far is the growth of the national income a sign of prosperity and a proof of increase in economic well-being?

It is very often said that an increase in the size of the national dividend is the best index of prosperity. But, under certain conditions, an increase in the annual income of a country in terms of commodities and services may be accompanied by a decrease in economic welfare as a whole. An increase in the aggregate size of the national dividend signifies an increase in economic

well-being when the absolute share of no large group of persons in terms of the commodities which that group is accustomed chiefly to consume decreases. Suppose population has increased faster than the supply of goods. The total share of poor groups of persons in the national dividend may be larger than before, but income per head will be less. Or suppose that while the supply of food has increased as fast as the population, or even faster, the price of food rises owing to the existence of monopoly or export. The monopoly would benefit only a class of persons, similarly the export trade would make the rich exporter still richer. The increase in the imports of articles of luxury and convenience would enable some classes or the community to raise their standard of comfort. All this may be admitted. But the rise in the price of food will diminish the absolute share of poor groups of persons in terms of the commodities and services which they are accustomed chiefly to consume. The increase in the aggregate size of the national dividend will not augment the economic welfare of the community as a whole.

We are apt to attach too much importance to the production of wealth, with the result that consumption is altogether neglected. Man is not merely a wealth producing machine. The end of all production is consumption. It is the duty of the economist to enquire whether an increase in the quantity of goods produced has led to an increase in the consumption of every class of the community. This cannot be taken for granted. A study of consumption is important in itself,

and not merely because consumption reacts on production. Economists love to talk about productive and unproductive consumption—this is again subordinating consumption to production. They praise consumption which results in increased production; they condemn consumption which has no such effect. But one does not consume in order to produce but produces in order to consume. Consumption, not production, is the final goal of economic activities. One who regards an increase in the aggregate size of the national dividend as an absolute proof of an increase in economic well-being argues in a round about way. Since the national dividend has increased, he thinks, the share of every one in the national dividend must have increased. But this may or may not be the case. Mr J. A. Hobson, a thinker of refreshing independence, in his stimulating work on "*Work and Wealth*" says that "a merely pecuniary statement of the 'value' of this dividend conveys no reliable information as to the human or vital welfare it involves. Making due allowance for all temporal or local variations of price, the statement that the national income has doubled in the last century or even that the income per head of the population has doubled, affords no positive proof that any increase has been made in the national welfare, much less how much increase."

The question of distribution is as important as that of production, or the size of the national dividend. Suppose that the national dividend increases one hundred per cent. but that the

whole of the increase or the major portion of it is monopolized by the wealthier classes of the community. There would be no increase in the economic well-being of the community as a whole in such a case. The rich undoubtedly become richer, but there is no improvement in the lot of the great majority. And it is the happiness of the great majority which is the economist's chief concern. It does not make much difference to a rich man when his income increases from ten thousand rupees a month to eleven thousand, but a ten per cent. rise in the income of a poor man means much to him. This is what is meant by saying that the marginal utility of money is greater to the poor than to the rich.

The national dividend is generally conceived in terms of money. The *real* dividend consists of concrete goods and services. But, following Hobson, we may say that the *human* dividend consists of "the amount of vital or organic welfare conveyed in the producing or consuming processes for which this concrete income stands." The prosperity of a country may be said to increase when the aggregate size of this human dividend increases.

Increase or decrease in the size of the human dividend, as defined above, can be measured by means of a double standard—the standard of consumption and the standard of cost. If the consumption of every class of the community, especially of poor groups of persons, increases, there is a *prima facie* reason for believing that human welfare has increased, provided the hours of labour have not become longer or the conditions

of work more arduous. The quantity as well as the quality of the things consumed should be taken into consideration. An increase in the consumption of intoxicating drinks or harmful luxuries is not an index of the growth of prosperity. The cost factor is very often neglected. But it is obvious that if the human cost involved in the production of goods or services increases, an increase in the amount of those goods and services does not imply any increase in economic well-being. In order to prove that a people's prosperity has increased it is necessary to show, in the first place, that the consumption of no group of persons, especially the poor, in terms of the commodities which that group is accustomed chiefly to consume, has decreased—that is, in no case have the necessities of the past become the luxuries of to-day, and in the second place, that there has been a fall in the real cost of production in terms of the pain and the sacrifice involved in the production of goods and services.

It is undoubtedly true that for some classes of our community the luxuries of the past have become the necessities of to-day. But it is equally true that for other classes of the community the necessities of the past have become the luxuries of to-day. Ghee has become a luxury for the poor. It was not a luxury when its price was two seers per rupee. Wheat, again, was not a luxury when its price was 30—40 seers per rupee. The demand for wheat, even in the Punjab, is elastic, i. e., a greater quantity of wheat is consumed when its price falls. When the price rises, poor people are compelled to substitute

barley, *bayra* or maize for wheat in their consumption. Milk again has become a luxury for the poor. If the Prices Committee had questioned agricultural and industrial labourers directly as regards the effect of the rise of prices, the tone of their report would probably have been less optimistic than it is. "It is the labourer's day," says Mr. Datta. I have met workers in some of the districts of the Punjab and also at Delhi, and questioned them closely about their consumption. They do not say that they are happy or that their consumption has increased:—

Moti, sweeper, age 20, general labourer—
*Bohat tang horda hai*¹

Buta, sweeper; age 40, general labourer—
Mehnat na mile to bhula rehna parta hai, jagir nahin, jardad nahin.²

Milkhi, chamar; age 40; general labourer—
Aukha qazara hunda hai. Rotti na mile to lamme ho ke pat ras.³

Beri, sweeper; age 32; general labourer—
Na labhe to bhuke bhi kut leti.⁴

Pir Bakhsh, water-carrier; age 45—*Koti hai to kapra nahin, kapra hai to rotti nahin*.⁵

Phiro, chamar; age 30; general labourer—
Hamataran nu sada taklef rehndi hai.⁶

1. We suffer much.

2. When out of employment I have to go without food. I have no *jagir* and no property.

3. We find it difficult to make the two ends meet. When we get nothing to eat, we perform starve.

4. When we find ourselves without the means to buy food, we go without it.

5. Sometimes there is food but very little clothing and sometimes clothing, but very little food.

6. The like of us always suffer.

Hussain Bakhsh, Sayyad, general labourer—
*Jis matli ne parda liya hai wo deha hai, ei wakt
 nahn to dusre wakt.*⁷

Ali Mahomed, age 45, general labourer—
*Ek din palki, ei din na palki*⁸

Karam Bakhsh, age 60, general labourer—
*Mil gaya lha liya nahn lamre par rae*⁹

Kallo, tarkash*—*Bari talkif hoti hai, rotiyan
 nash nahn hote, un un din sake aare hain*¹⁰

Musharraf Hussain, dabliya*—*Gu-ara na
 guftah beh hai Rozi nahn to ro-ah*¹¹

Abdur Rahman, dabliya—*Mausim ko dekh liye,
 jaise oucaren ki surat hai Talkif hai ya rahat hai,
 mauim ko dekh liye, kam wale jinhe hain sab hi
 bichare dikkat main hain.*¹²

With such evidence before one it is impossible to conclude that the consumption of the people has increased. Direct questions on the consumption of ghee and milk elicited the following answers—

7 The Creator gives (bread) if not at one time, then at another

8 Sometimes there is bread to eat one day but none on the day following

9 There is no alternative but to go with ut food when there is nothing to eat

10 We suffer much. We do not get bread to eat. Sometimes we have to go without food for three days together

11 The less we talk about how we live, the better. No roza (employment) means a roza (fast)

* Worker in the wine drawing industry

12 We are passing through hard times and that is a sufficient answer to the question as to how we live, whether in comfort or discomfort. All labourers, poor fellows, are in trouble

GHEE.

Sadde nasiban uich kithhe.¹³

Kah da khana hai.¹⁴

Ajkal kithhe Lha honda hai.¹⁵

*Ghee kiyा kharnge, ate hr se jursat nahin ; nak
Latti ho rahi hai.¹⁶*

*Ghee paise do paase ka. Rukhi rote bhi mil ja
te ganimat hai.¹⁷*

Labhe ki gal hai.¹⁸

Hamataron ne kt khana.¹⁹

Tuk labhe to thora.²⁰

MILK.

Mar de sharir da pita hogz.²¹

Gariyan nun kt ml sakda hai.²²

Dudh bachpan main pi liya jab bap jita tha.²³

Jhut hai.²⁴

Chhote honge to pite honge.²⁵

Hosh main piya hi nahin.²⁶

13. Ghee is not meant for poor people like us

14. Do'nt talk of ghee now a days

15. We cannot afford to buy ghee now a days.

16. What to talk of ghee, we do not get enough bread to eat

17. Ghee worth a pice or two. We thank our stars when we get even unbuttered bread

18. Yes, when we have money for it.

19. The like of us cannot afford to buy ghee

20. It is much if we have a slice of bread.

21. No milk except that which I sucked at my mother's breast.

22. Poor people cannot afford to buy milk

23. I used to get some in my childhood while my father was living

24. No,

25. Probably, when I was a child

26. Never tasted milk since I grew up

*Aji bas myan¹ dudh ki jae pani mil jae to
achha²⁷*

All complained bitterly of *kal*. *Kal* means high prices—whether the scarcity of food and the resulting high prices are due to unseasonable rainfall or to other causes “*Kal sada li rehta hai*,”²⁸ said one of them, and it is only too true that even when there is no famine in the country prices do not fall. The labourer cannot understand why the price of food remains at a high level even in years of good rainfall and plentiful harvests. All that he knows is that he has to buy his *ata dal* and *ghee* at famine prices, and that does not make him happy.

The high price of food has contributed not a little to the increase in the indebtedness of poor people. *Rupaye kul main charhte hain*²⁹, I was told. I can easily understand how a man with an income of 10 to 12 rupees a month, with a large family to support, cannot help running into debt. Extravagant expenditure on the occasion of a marriage or a funeral, it is said is the chief cause of indebtedness. But it is impossible for a poor man to avoid running into debt even if marriage and funeral expenses are moderate. The cost of living is high and his savings are nil. The deposits in savings banks have increased, but it would be interesting to learn what part of these deposits is workmen's deposits, i.e., the savings of poor people whose income does not

27 Enough of this! Even water in the place of milk will do.

28 There is always *kal*.

29 *Kal* is a cause of our indebtedness.

exceed 15 rupees a month. In ordinary times, when employment is regular, the poor labourer has great difficulty in making the two ends meet. It is no wonder at all that when there is a marriage or a funeral he is compelled to have recourse to borrowing. It is a wonder why any one lends him anything. Most of the labourers questioned had to pay debts of varying amounts. There were, however, a few who proudly told me that they had no debts to pay. One of these was Pir Bakhsh, water carrier, Jullundur, a devout Mohammaden who said —

*Bhul e rehna manzur hai, garaz lena manzur nahin.*³⁰

To conclude. Economic well-being and prosperity are interchangeable terms. The growth of prosperity should, therefore, be measured by increase in well-being. The increase in the consumption of all classes of the community, especially the poorest classes, is the only reliable index of the growth of economic well-being or prosperity. A rise in the prices of necessaries of existence, which diminishes the consumption of the poor, is not a sign of increasing prosperity.

30 I would rather starve than borrow

Unrest in the Punjab—Its Economic Causes.*

One of the most important causes of the present unrest in the Punjab is undoubtedly the enormous rise in the prices of food grains since 1912, which has diminished the real wages of labour, urban as well as rural. The following table shows the prices of the food grains most largely consumed in the province in December 1912, December 1917 and June 1919. For the sake of comparison average prices for 1894 have been shown in a separate column.

	Retail prices of food grains during the fortnight ending 15th Dec 1912				Fortnight ending 1st December 1917				Fortnight ending 1st June 1919				1894
	Srs	Chs	Srs	Chs	Srs	Chs	Srs	Chs	Srs	Chs	Srs	Chs	
Wheat	12	4	8	2	6	9	23	14					
Bailey	15	1 ³	11	14	8	3	38	8					
Jawar	15	12	11	9	4	3	31	9					
Bajra	12	3	10	12	4	2	23	0					
Gram	15	1	9	12	7	7	34	0					
Maize	16	3	10	0	6	6	30	6					

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	1912	1917	1919
Wheat	100	151	187
Barley	100	133	186
Jawar	100	136	376
Bajra	100	123	320
Gram	100	154	203
Maize	100	162	254
Average	100	143	254

The following table shows the rise of prices in June 1919 as compared with the year 1894 —

	1894	1919
Wheat	100	364
Barley	100	453
Jawar	100	748
Bajra	100	558
Gram	100	457
Maize	100	476
Average	100	509

It will be seen that, as compared with 1912, the prices of food grains, on an average, rose 48 per cent in 1917, and 154 per cent in 1919, as

compared with 1894, prices have risen five times. It should also be noted that in the present year the prices of inferior food grains have risen to a greater extent than the price of wheat.

The rise of prices inflicts no injury upon the labouring classes if wages rise more rapidly than prices. Sometime ago the Government of India appointed a Committee to investigate the causes and effects of the rise of prices in India during the years 1890-1912. As regards the effects of the rise of prices the view of the Committee was that the increase in the profits of agriculture had made India prosperous and that the labourers in every part of the country had shared in this prosperity. Statistics compiled by Mr. Datta show "that the wages of every class of wage-earners have risen in rural and urban areas and in cities much more rapidly than retail prices, and that the rise has been greatest in rural areas, and that among different classes of wage-earners the unskilled labourer in urban areas has obtained the largest increase. The rise has been steady throughout the period. In rural areas wages of both agricultural labourers and village artisans have risen enormously as measured by their purchasing power of commodities." Since 1912, however, prices of food grains in the Punjab have risen far more rapidly than wages. The first regular Wages Survey of the Punjab was taken in December 1912 and the second in December 1917. Reports of the Surveys show that while wages have risen in urban and rural areas, they have not risen to the same extent as the prices of food grains, with the result that real wages have in most cases fallen. The num-

ber of villages selected for enquiry in 1917 was 1829, of which 97 per cent reported. In 17 per cent of the villages the rate of wages (including the money value of any supplements) paid to agricultural labourers was 4 annas or less (25 per cent in 1912); in 27 per cent of the villages it varied between 4 annas and 6 annas (48 per cent in 1912), in 27 per cent of the villages it varied between 6 annas and 8 annas (26 per cent in 1912), and in 17 per cent of the villages it was more than 8 annas (4 per cent in 1912). The increase or decrease in the wages of every class of labourers in urban and rural areas as compared with 1912 is shown by the following tables —

URBAN WAGES

Class of Labourers.	Percentage of increase or decrease		
	Lahore	Amritsar	Multan.
Workers in iron and hardware	+ 25	Nil	Nil
Brass Copper and bell metal workers	+ 25	+ 12	Nil
Carpenters	+ 13	Nil	+ 10
Cotton Weavers	+ 115	+ 33	Nil
Masons and builders	+ 25	Nil	Nil
Unskilled labourers	+ 29	+ 19	+ 29

RURAL WAGES

Percentage of Increase or Decrease

District.	Carpenters	Blacksmiths	Masons	Unskilled Labourers	Ploughmen
Hissar	+ 43		+ 13	+ 24	+ 57
Iohark	+ 31		+ 56	Nil	
Guigaon	+ 29		+ 10	+ 50	+ 36
Karnal					+ 19
Ambala	+ 23		+ 4	+ 20	+ 21
Simla					+ 27
Ka 12	+ 18	+ 29	+ 10	+ 14	+ 25
Hoshiarpur	+ 9	+ 22	8	+ 9	+ 53
Jullundur	+ 21		+ 6	+ 25	+ 26
Ludhiana	+ 35		+ 19	+ 27	+ 45
Ferozepur	+ 19	+ 6	+ 6	+ 33	+ 59
Lahore	+ 25		+ 8	+ 23	+ 41
Amritsar	+ 14		+ 19	+ 45	+ 27
Gurdaspur	+ 8		+ 14	+ 33	+ 47
Sialkot	+ 5		+ 19	+ 14	+ 31
Gujianwala	+ 16		+ 3	+ 33	+ 21
Gujrat	+ 11		+ 43	Nil	+ 17
Srihpur	+ 5		+ 8	+ 7	+ 32
Jhelum	+ 5		+ 8	+ 33	+ 14
Rawalpindi	50		+ 45	+ 9	+ 8
Attock	+ 42		+ 17	+ 20	+ 43
Mianwali	+ 36	+ 42	+ 3	+ 33	+ 33
Montgomery	+ 3		- 6	+ 14	+ 25
Layallpur	+ 1	+ 3	+ 6	Nil	+ 14
Jhang	+ 9	+ 10	+ 8	Nil	+ 20
Multan	+ 13		+ 7	Nil	+ 38
Muzaffargarh	+ 18		+ 19	- 11	
Deira Ghazi Khan	+ 23		+ 19		+ 36

The tables show that, except in the case of weavers, wages of every class of labourers in towns rose, in December 1917, less than the 43 per cent. rise in the prices of food grains, and as regards rural wages, that the wages of carpenters rose more than 43 per cent. in one out of 28 districts, wages of masons, in two districts; wages of unskilled labourers also in two districts, and wages of ploughmen in 5 districts. Real wages of agricultural and other labourers, therefore, fell over a great part of the province. The average price of food grains in June 1919, it has been shown above, rose 154 per cent. as compared with that for December 1912. One does not know whether wages since December 1917 have risen or remained stationary, and in case they have risen, to what extent. But there is very little doubt that since December 1917 real wages have fallen, and fallen heavily.

The real causes of unrest in the Punjab are to be found in the heavy fall in real wages of large masses of the people and the consequent lowering of their standard of living. Many people think that the rise in the prices of agricultural produce is beneficial to an agricultural country. "It is sometimes held" we read in the official Report on the Rise of Prices "that on the whole, the greater portion of the community is benefited by falling prices. This would, however, apply to a country in the van of industrial progress and not to an agricultural country like India.... There can hardly be any doubt that in an agricultural country like India, rising prices would be beneficial to the country as a whole." It must

be admitted that rising prices enrich large cultivators, but it is difficult to understand how rising prices enrich small cultivators who, in most cases, produce little more than what is necessary for their own consumption, or agricultural labourers whose wages, as a rule, do not rise as rapidly as the prices of food grains. It may be objected that in our villages wages are partly paid in grain, and for that reason the rise in the price of food grains does not much affect the agricultural labourer. With the rise in prices, however, the tendency to substitute cash for grain wages has increased in all parts of the province. The Wages Survey of December 1912 showed that purely grain wages were paid in only 2 per cent of the reporting villages, in 1917 the percentage fell to one. The number of villages which reported purely cash wages in 1917 was 61 per cent of the total number of reporting villages, as against 58 per cent at the preceding Survey, the percentage of villages reporting cash wages with supplements decreased from 40 to 38.

We should also remember that along with the prices of food grains and other agricultural produce the prices of manufactured goods, whether imported or made in India, have risen. It was with great difficulty that the labourer could make the two ends meet before the war. His position now is one of great poverty, degradation and misery. It is no exaggeration to say that he practically starves. The daily wages of 83 per cent. of agricultural labourers, it has been shown, do not exceed 8 annas. It is obvious that the agricultural labourer has not shared in the prosperity of the land-owning classes.

It may also be pointed out that while the most important cause of the rise in wages is the rise in the prices of the necessities of life, it is not the only cause. Some district officers sent brief notes along with their wages returns in December 1917. According to these notes the increase in wages was the result of (1) high mortality due to plague and malaria, (2) the damage done to the houses by heavy rains in September and October 1917, (3) recruitment for the army and (4) the rise in prices. In some parts of the province causes other than the rise of prices undoubtedly operated to raise wages to some extent at least. It follows that in some districts the rise in wages, being due to a temporary increase in the demand for labour, cannot be permanent. If wages fall while prices continue to rise, the lot of the labourer, bad as it is, will become worse.

As his income is small the labourer must spend a very large proportion of it on food. To save him from starvation Government should control the prices of food grains. The prosperity of a people cannot be said to increase when the consumption of the poorest classes in terms of the necessities of life decreases. And there is bound to be unrest when poor people begin to starve.

Paper Currency during the War.*

The note circulation was steadily increasing from year to year before the war: the average circulation was Rs. 54,35 lakhs in 1910-11; Rs. 57,87 lakhs in 1911-12; Rs. 65,62 lakhs in 1912-13 and Rs. 65,55 lakhs in 1913-14. In 1914-15 there was a contraction of the currency, and the average note circulation in that year was Rs. 14 crores less than that of the previous year. In 1915-16 the average note circulation was Rs. 64,10 lakhs, or about the same as in 1914-15, but in 1916-17 the average suddenly increased to Rs. 76,14 lakhs and the total circulation on the last day of March 1917 was actually Rs. 85,37 lakhs, showing an increase of Rs. 15,64 lakhs as compared with the circulation on 31st March, 1916. The increase

* August 1918.

in circulation since 31st March 1917 is shown below :—

Last day of	Total circulation (in lakhs of rupees).
March 1917	86,37
April ,	81,72
May ,	86,30
June ,	93,28
July ,	99,31
August ,	105,15
September ,	108,42
October ,	114,76
November ,	112,92
December ,	108,80
January 1918	104,81
February ,	103,40
March ,	99,79
April ,	105,96
May ,	111,52

The total circulation on the last day of October 1917 was about double the average circulation in 1911-12 and more than double the average for 1910-11.

With the increase in the total circulation, the invested portion of the Paper Currency Reserve has also increased. It amounted to Rs 14 crores on 31st March 1915, of which Rs. 10 crores

were held in India and the remaining Rs 4 crores in England. In accordance with the recommendations of the Chamberlain Commission the invested portion of the Reserve was increased to Rs 20 crores in 1916 of which about equal amounts were held in India and England on 31st March 1916. The Currency Commission, however did not fix Rs 20 crores as the maximum of the fiduciary portion of the note issue. The maximum limit was to be an elastic one it was determined by the amount of notes held by Government in the Reserve Treasuries plus one third of the net circulation*. This rule, however has not been followed. Power was taken under section 3 Act XI of 1918 as amended by Ordinance No 11 of 1917, to increase the invested portion of the Reserve. On March 31st, 1917 while the total circulation amounted to Rs 86.37 lakhs the cash held against the notes in India and England amounted to Rs 37.68 lakhs. If the rule laid down by the Chamberlain Commission had been followed the cash portion of the Reserve would have amounted to Rs 64.65 lakhs and the fiduciary note issue to Rs 31.72

* Net circulation is found by deducting from the gross circulation notes held in the Government Reserve Treasuries

lakhs. The increase in the fiduciary note issue since 31st March, 1917, is shown below —

	<i>Last day of</i>	<i>Securities held in</i>	
		India (Lakhs)	England of rupees.)
March	1917	9,99	38,49
April	"	"	40,78
May	"	"	47,67
June	"	"	51,17
July	"	"	51,47
August	"	"	51,48
September	"	"	51,48
October	,	"	51,47
November	,	"	51,47
December	"	"	51,48
January	1918	"	51,47
February	"	,	51,47
March	.	"	51,47
April	"	"	59,48
May	"	"	64,15

The following table shows the proportion of the average fiduciary note issue to the average circulation from 1910-11 to 1916-17, and the proportion of the fiduciary issue to the total

circulation on the last day of each month, beginning March 31st 1917 —

1910—11	22.0
1911—12	24.4
1912—13	21.3
1913—14	21.3
1914—15	21.8
1915—16	31.0
1917—17	63.6

Last day of March 1917,	56.0
" April "	61.3
" May "	65.3
" June "	65.5
" July "	61.8
" August "	58.4
" Sept. "	56.7
" October "	53.5
" Nov. "	54.4
" Dec. "	56.7
" Jan 1918,	58.6
" Feb. "	59.4
" March "	61.5
" April "	65.2
" May "	66.4

A very considerable proportion of the invested position of the Reserve is now held in England.

Before the war the percentage of the Reserve held in the form of British securities was small. During the war this percentage has increased rapidly. The proportion of the invested portion of the Reserve held in England to the total circulation is as follows :—

Last day of March	1914	...	6·0
"	1915	..	6·4
"	1916	...	14·7
"	1917	...	44·5
"	1918	...	51·5
April	1918	...	55·8
May	1918	..	57·4

That part of the Reserve which is held in India in the form of securities has not increased. The investment in Indian securities amounted to Rs. 9,99,99,946, on 31st March, 1918, as on the same day five years ago.

For the purposes of the convertibility of notes, the gold held in England is as useless as the British securities, except in so far as it would facilitate the purchase of silver with a view to the coinage of rupees. It may be, therefore, interesting to know the proportion of the Reserve, securities and gold, held in England to the total circulation on various dates, as also the propor-

tion of cash held in India against the notes to the total circulation —

Last day of	Proportion of the Reserve (securities and gold and silver) held in England to total circulation.	Proportion of cash held in India to total circulation.
March 1914	19.8	64.9
1915	18.9	64.8
" 1916	32.3	52.1
" 1917	51.9	35.9
" 1917	55.9	32.1
April 1917	59.8	28.7
May "	60.0	29.3
June "	50.2	38.8
July "	51.3	39.1
August "	48.7	41.8
September "	46.0	44.7
October "	46.8	43.5
November "	48.1	42.3
December "	49.7	40.3
January 1918	50.3	40.2
February "	52.2	37.9
March "	56.2	28.8
April "	57.9	22.4
May "		

The two chief causes of the depreciation of Government currency notes are (1) The extraor-

dinary increase in the note circulation during the war and (2) the depletion of the Reserve held in India for the encashment of the notes, as shown above. Convertible paper money, as a rule, cannot depreciate so long as it remains convertible in the full sense of the term. Convertibility means the conversion of paper money into legal tender metallic money on the demand of the holder. Paper which is not thus capable of conversion is inconvertible, whatever it may promise and however it may be guaranteed. It is clear that if legal tender metallic money, equal to the face value of the paper, can be obtained for the paper on the demand of the holder, the paper cannot depreciate. No one would accept less than five rupees for a note in the bazar when he can get five rupees for it by presenting it at the office of issue. But it is equally clear that if there is delay in, or lack of facilities for, the conversion of notes into legal tender cash, or there exist any restrictions on their conversion in practice, paper purporting to be convertible may depreciate. The Bank of England notes depreciated in the early part of the nineteenth century in spite of the fact that they were legal tender. The American Greenbacks were legal tender, and so also were the famous French *assignats*, the paper money issued by the revolutionary government in France in the last decade of the 18th century. The *assignats* were over issued and depreciated rapidly, and it was found that in spite of the paper being legal tender, an *assignat* professing to be worth £4 sterling was actually worth less than 3d. in

value. The Government by conferring the quality of legal tender upon paper money make it lawful for debtors to discharge their debts in paper. But the Government cannot compel any one to give hundred rupces in specie for the same amount in notes. That explains why even legal tender paper may depreciate, when it is not fully convertible.

Our paper money has been over-issued. An addition to the note circulation, of course, does not mean an addition to the total volume of the currency, for notes merely take the place of the rupee circulation, unless the new issues are simply added to the revenue. But every addition to the note circulation alters the proportion of the notes to the rupees in the total circulation, unless the rupee circulation is also proportionately increased. For example, the rupee circulation in 1912 amounted to 163 crores of rupees and the note circulation to 69 crores, the proportion of notes to rupees in the total circulation, consisting of rupees and notes, being 42.3 per cent. On March 31st, 1918, the note circulation was about 106 crores. If the rupee circulation had not increased at all, the proportion of notes to rupees in the total circulation would have been 65 per cent. As a matter of fact the circulation of rupees during the war has increased and 65 per cent. is an over-estimate. The proportion of metallic money to the circulation depends upon the habits of the people. For some purposes paper may be a more convenient form of currency than metallic money; for other purposes the latter may be preferred. Convenience and custom

establish a ratio between the use of notes and cash, which tends to remain constant over long periods of time. Now if paper money is forced into circulation so that the proportion of paper to metallic money in the circulation increases, the excess will remain in circulation, but the whole mass of notes must depreciate. Convertible notes cannot depreciate provided the notes are convertible in practice as well as in theory, i.e., the excess issues will return from circulation so that the old proportion between notes and metallic money is restored. If, for any reason, the excess cannot return from circulation, even convertible notes must depreciate. The whole question whether notes are legal tender and those refusing to take them at their face value can be prosecuted by the Government, is beside the point.

We are now in a position to understand why there is a discount on Government currency notes. During the war the note circulation has been enlarged by about 46 crores, the proportion of notes to rupees in the circulation is much higher than it was before the war. The rise in the price of silver has converted the profit on the coinage of rupees into a loss, and the Government seem to be trying to popularise notes by forcing them into circulation. Now the habits of the people as regards the relative proportions in which different forms of currency are used change very slowly, and in three or four years they do not change at all. In India, the great majority of the people being uneducated and ignorant, a decrease in the proportion of paper money to

metallic money in circulation would have been more popular than an increase, particularly in a time of war like this. The probable increase in this proportion is the root cause of the trouble. But our notes, it will be said, are convertible. The excess therefore, cannot remain in circulation. Well, it could not remain in circulation for a day or even an hour, if the notes were convertible into cash, as of right, at fifty different centres in India. The notes then could not depreciate. But the facilities for the conversion of notes are very limited. The Government of India 'promise to pay the bearer on demand at any office of issue the sum of Rs ——'. But there are only seven offices of issue in India. For the whole of the Punjab there is only the Lahore office from which cash can be demanded as of right for notes, and the amount of notes which the Lahore office can convert in a day is limited.* The discount on notes in these circumstances is likely to vary directly as the distance from the centre of issue, making allowance for the varying rupee demand of the place.

The currency situation is undoubtedly serious and steps should be immediately taken to remedy the evil. The Government should do all in their power to restore the confidence of the people in the paper currency, which has been a little shaken by their policy of forcing notes into circulation. The consequences of depreciation

* District treasuries encash notes as a matter of convenience. The free encashment of notes at district treasuries was withdrawn in 1915—9.

would be serious. According to a well known economic law, the rupee would begin to disappear from circulation, and if money in the form of notes is available in sufficient quantities to do the community's work, the rupee would disappear from circulation altogether. In the second place, all paper prices would rise, while prices as measured in silver rupees, apart from the action of other causes tending to raise prices, would remain the same. The depreciation of notes would add a new and powerful cause to those which are already tending to raise our price level, and the extent of the rise of prices due to this cause would be limited only by the amount of the depreciation of the notes. Heaven help the poor then !

Prices during the War.

The extent of the rise of prices in India during the war is shown by the table I. Classes I and II represent country produce consumed and exported, while class III deals with imported commodities. The basic period is the first decade of this century viz. 1900 to 1909. It will be seen that the rise of prices was greatest in the case of imported articles. As compared with the pre-war year 1913 general prices about doubled in 1919.

The growth in the active circulation of rupees and notes is shown by the following table —

In crores of rupees

Year ending March 31st	Active rupee circulation	Active note circulation	Total
1914	187	50	237
1915	204	44	248
1916	217	53	265
1917	227	67	294
1918	219	84	303
1919	228	134	362

During the six years from 1914 to 1919 the circulation increased by Rs. 1,250,000,000; during the preceding period of six years, from 1909 to 1914, the increase amounted to Rs. 390,000,000 only. The expansion of our note circulation during the war has been described in Chapter IX. Very large purchases were made in India by the Indian Government on behalf of the British Government, which were paid for by the issue of notes against British Treasury Bills. Investments were also made in 1916-19 and 1919-20 in Indian Treasury Bills. When the Government issue notes against their own Treasury Bills, the transaction amounts to a forced loan from the people. The gross circulation of notes, in this way, gradually increased to Rs. 153 crores on 31st March 1919 as compared with Rs. 61 crores in 1914. Sir James (now Lord) Meston in introducing the Indian Budget for 1919-20 said —

“Although practically every belligerent country has had to finance itself by an abnormal recourse to the printing press, warnings are now heard on all sides about its serious consequences. Here in India, if our responsibilities for meeting war expenditure forced us to err in this direction, we certainly have sinned against the light to a very much smaller extent than other countries”.

The increase in the circulation of paper money in India during the war as compared with that in other countries was insignificant. The chief cause of the rise of prices in Russia, Germany and European countries has been the over issue of paper money and its consequent depreciation

as compared with gold. Our paper money is convertible into silver and our prices are also silver prices. There was a discount on notes in India during the war, but in most parts of the country it was not more than 5 to 10 per cent.

Another cause of inflation was Government borrowing. Money was advanced to Government both by banks and private individuals. The investments of Indian banks increased during the war, as the following extract from a Government Report* would show —

"A remarkable increase in the investments of the Presidency and Exchange Banks took place in 1917, as compared with the pre-war year. The investments of the Presidency Banks increased by almost Rs. 9½ crores or 142 per cent. while those of the Exchange Banks which do a considerable portion of their business in India more than doubled. The Indian Joint-Stock Banks show an increase of over Rs. 170 lakhs or 68 per cent.

"It may be safely concluded that the increase in investments is due in no small measure to the large subscriptions to Government issues of all kinds since the out-break of war".

The Banks made advances not only to Government but to private individuals who wished to subscribe to Government loans but had no funds immediately available. All this increased the supply of money and helped to inflate prices.

*Statistical Tables relating to Banks in India, 4th Issue.

GROWTH OF CURRENCY AS COMPARED WITH THE
GROWTH OF BUSINESS.

Mr. Findlay Shirras, then Director of Statistics, and the author of "*Indian Finance and Banking*", has constructed index numbers showing the growth of business in India during the war. He compares the index numbers of business with those of currency, and arrives at the conclusion that up to 1916 "the active rupee and note circulation taken together moved in harmony with the growth of business", since that date, however, "the active rupee and note circulation has outstripped the growth of business".* The index numbers show that while the currency increased 50 per cent. in 1918-19, business increased only 30 per cent.

It seems to me that even this 30 per cent. is an over-estimate. Mr. Findly Shirras' method of constructing the general index number of the growth of business is open to serious objections. Like Mr. Datta of the Prices Enquiry Committee he takes increase in value as an index of growth where he should have considered quantities only. Again, passengers carried by railways, gross earnings of rail-^{ways} (swelled by the increase in rates), value of ^L _l y orders paid in each year, paid-up cap ^{opo} of joint-stock companies and receipts and disbursements of the Government of India, can be regarded, at best, as indirect indices of trade. It is well-known that our export and import trade suffered such during the war, but if any one merely looked at the value of goods imported and exported he would not think that the decline in

our foreign trade, particularly during the last year of the war, was very serious. But if the quantities of imports and exports are considered, it is found that in 1918-19, as compared with 1913-14, India's foreign trade fell off about 40 per cent. The increase in value, which was wholly due to the rise of prices, conceals the shortage in the quantities imported and exported. As regards the "receipts and disbursements of Government of India in India and in England (excluding remittances)" the index number of which rises from 121 in 1913-14 to 392 in 1918-19, it cannot be denied that the rise of prices was in part responsible for the growth of Government receipts and disbursements.

My index number of the growth of business during the war is an average of the index numbers of foreign trade (value of 77.5 per cent. of foreign trade calculated at the prices of 1913-14), tonnage of vessels entered and cleared with cargo; inland trade, imports and exports (quantities), freight carried by railways, production of raw jute, raw cotton, Indian cotton yarn and woven goods, rice, wheat, tea, oil seeds, coal, iron ore, and petroleum. The index numbers of the growth of business are compared with those of the growth

of rupee and note circulation in the table given below —

Year Commencing April 1	Index number of the growth of business.	Index number of the growth of circulation.
1913	100	100
1914	99	105
1915	103	112
1916	109	124
1917	106	128
1918	97	153

It would appear that the growth of circulation was much more rapid than that of business during the whole period. During the last two years particularly while trade was actually contracting, the growth of circulation became more marked. It may, therefore, be concluded that in addition to particular causes that were tending to raise the prices of particular commodities, causes of a more general nature affecting all commodities were also in operation at the same time.

RELATION OF PRODUCTION TO CONSUMPTION.

For the purposes of our inquiry it would be convenient to deal separately with the probable causes of the rise in the prices of imported articles on the one hand, and raw produce and food stuffs on the other. As we shall see presently,

the rise in the prices of manufactured goods in India, which are mostly imported, is due to the action of a group of causes which are not responsible for the rise in the prices of food and some raw materials.

Table A shows the imports of certain articles into India from foreign countries. As compared with the pre-war year 1913-14 the shortage of imports in 1918-19 was as follows —

Sugar	41 per cent.
Silk piece goods	37 "
Woollen piece goods	79 "
Galvanized sheets and plates	99·1 "
Kerosine oil	81 "
Printing paper	52 "
Salt	31 "

By far the most important of our imports is that of cotton goods. The net yardage of cotton goods imported into India is shown below:—

In crores of yards

Years.	Grey	Bleched.	Dyed.	Fents.
1913-14	152·96	78·46	78·31	3·78
1914-15	131·75	59·74	46·85	2·64
1915-16	114·39	60·22	33·08	2·97
1916-17	81·90	57·02	40·54	4·17
1917-18	59·17	48·91	35·77	3·21
1918-19	54·20	26·15	17·96	2·46

The annual average imports from 1914-15 to 1918-19 and the percentage decrease in imports as compared with the pre-war year are shown below:—

	Average imports, 1914-15 to 1918-19, in crores of yards.	Percentage decrease.
Grey	88.28	—42.3
Bleached	50.41	—35.8
Dyed	34.48	—55.6
Fents	3.09	—18.3

While the imports of piece goods fell off considerably, there was an appreciable increase in the home production of grey and dyed goods, as is shown by the following table —

Net production in crores of yards

Years,	Gray.	Dyed.
1913-14	82.87	24.68
1914-15	85.75	22.12
1915-16	104.08	28.76
1916-17	97.90	33.72
1917-18	106.55	36.25
1918-19	102.02	27.84
Annual average 1914-15 to 1918-19.	99.26	29.74
Percentage increase	19.8	20.5

The rise in the prices of cotton piece goods is shown by the following figures —

*Imported piece goods Price per yard
In annas*

Years	Grey	Blended	Dyed	Rents
1913 14	2 56	2 88	3 36	2 24
1914 15	2 56	2 88	3 36	2 24
1915 16	2 56	2 72	3 52	2 40
1916 17	3 04	3 36	5 28	3 86
1917 18	4 80	4 48	4 46	4 80
1918 19	6 47	7 34	8 82	5 60

Indian piece goods In annas per yard,

Years	Grey	Dyed
1913 14	2 44	3 04
1914 15	2 33	3 02
1915 16	2 16	3 29
1916 17	2 92	4 87
1917 18	4 48	6 00
1918 19	5 95	7 10

It is obvious that the rise in the prices of imported cotton goods was due to shortage in the supply. And yet, considering the extent of the rise, one cannot help thinking that there were probably other causes also at work. For example, if the quantities imported and prices of cotton goods in 1915-16 are compared with those in 1913-14, it is found that in spite of the serious shrinkage of imports prices did not rise much, while in one case there was actually a fall. If the quantities imported and prices in 1918-19 are compared with those in 1915-16, the rise in prices seems to be out of all proportion to the decrease in imports —

Percentage decrease in imports of cotton piece goods and the rise or fall in prices in 1915-16, as compared with 1913-14.

	Shortage.	Prices.
Grey .	25.3%	No change
Bleached . . .	23.3%	5.6% Fall
Dyed . . .	57.7%	4.7% Rise
Fents . . .	21.8%	7.1% Rise

Percentage decrease in imports of cotton piece goods and the rise of prices in 1918-19 as compared with 1916-17.

	Shortage.	Prices.
Grey	..	52.6
Bleached	..	56.5
Dyed	.	45.7
Fents	...	17.2

In view of the fact that the growth of our currency was much more rapid between 1915-16 and 1918-19 than between 1913-14 and 1915-16, it does not seem to be unlikely that the prices of imported goods were influenced, to some extent at least, by the general depreciation of the rupee in terms of commodities during the later years of the war. It is remarkable that a decrease of 56.5 per cent caused the prices of bleached goods to rise about 170 per cent. in 1918-19, while in spite of a shortage of 23 per cent. prices actually fell about 6 per cent. in 1915-16. The very great rise of prices in 1918-19 is understandable only on the assumption that the prices of imported cotton goods, as of other goods, rose in India between 1915-16 and 1918-19 partly on account of the general fall in the purchasing power of the rupee.

FOOD.

Except in 1918-19, a year of scarcity, there was never at any time during the war any short-

age in the supply of food. Table E. shows that the production of the principal food grains, excepting barley, decreased in 1918-19 as compared with the pre-war year. In each of the other years the production of wheat, jwar, bajra, gram and barley, exceeded that in 1913-14. In 1914-15 also the yield of rice and maize was less than in the pre-war year, 15.5 per cent. and 1 per cent. respectively. Considerable quantities of wheat, gram and barley were exported in 1917-18, but great quantities had also been produced in the country. The quantity of gram produced in 1917-18 was 128 per cent. greater than in 1913-14; in view of this fact the quantity exported, about 17 per cent. of the total production, could not have caused any very great scarcity of gram in the country. As regards jwar, bajra and maize, the European demand for them is small, as is shown by the very small percentage of exports to total production. On the whole it cannot be said that the rise in the price of food during the war, except in 1918-19, was to any extent due to scarcity conditions.

RAW MATERIALS.

The position regarding raw materials is summarised below.—

Gur. (Unrefined sugar or jaggery)—No shortage. Price nevertheless rose. ,

Tea. The quantity available in India is thus estimated :—

In thousands of lbs.

Year	Production	Deduct net exports to foreign countries	Add stocks from previous years	Deduct stocks left at end of year.	Balance available for consumption
1913-14	307,249	284,452	1,884	2,418	22,263
1914-15	312,976	293,685	2,418	2,423	19,285
1915-16	371,836	331,524	2,423	13,000	30,734
1916-17	368,428	283,325	13,000	61,000	37,102
1917-18	371,296	346,588	61,000	43,500	42,208
1918-19	380,458	312,004	43,500	59,532	52,421

It will appear that though there was some shortage in 1914-15, the quantity available for consumption increased rapidly till the amount in 1918-19, as compared with that in 1913-14 had more than doubled. The price of tea in 1919 fell one pice as compared with the year 1913, but in other years it was much higher in spite of the larger amount available for consumption.

Cotton and Jute.—Except in 1914-15, the total yield of these crops was less in every year than in the pre-war year. The rise in their prices seems to be chiefly due to the shortage in supply.

Linseed.—No shortage except in 1918-19. Linseed, however, is grown in India solely to

meet a foreign demand. Its price thus entirely depends upon fluctuations in foreign demand.

Rape and mustard seed.—No shortage except in 1918-19. The export of seeds and rape and mustard oil were not very large as is shown by the following table:—

Quantities of rape seed and mustard seed and rape and mustard oil exported from India from 1913-14 to 1918-19.

Year	Rape seed	Mustard seed	Rape and mustard oil.
	Tons	Tons	Gallons.
1913-14	249,005	5,104	407,178
1914-15	96,912	2,553	413,189
1915-16	95,214	3,178	465,735
1916-17	122,272	6,192	574,696
1917-18	59,309	1,894	488,527
1918-19	79,662	1,888	265,672

Sesame.—No shortage except in 1917-18 (5 per cent.) and 1918-19 (36 per cent). The exports of sesame and sesame oil are shown below:—

Exports of Sesame and Sesame Oil

	1913-14.	1914-15.	1915-16
Sesame (tons) ...	112,200	46,700	13,800
.. Oil (gallons)	208,053	118,583	1,841,301
	1916-17	1917-18	1918-19
Sesame (tons) ...	83,600	16,193	2,384
.. Oil (gallons)	219,834	240,199	119,500

Groundnuts—There was no shortage except in 1918-19. As is shown by the table given below the exports of groundnut oil increased considerably during the war. But if the gallonage is converted into the weight of seeds assumed necessary to produce it, the oil exported is found to represent an almost negligible percentage of the total tonnage. The bulk of the oil crushed is consumed in India.

Exports of groundnuts oil and cake from British India from 1913-14 onwards

(000 omitted)

Year	Ground nut	Ground nut cake	Ground nut oil
	Tons	Tons	Gallons
1913-14	278	62	288
1914-15	38	64	223
1915-16	175	87	373
1916-17	147	54	982
1917-18	115	50	1 057
1918-19	7	56	590

Indigo—There was a very considerable increase in the yield of indigo. Exports also increased in 1918-19 the quantity exported was three times that exported in 1913-14. The great

rise of prices was due to the shortage of dye-stuffs owing to the war.

As regards raw materials we may conclude that shortage in production does not explain the rise in prices. Except in the year 1918-19, there was in India no serious shortage in the supply of various seeds, while increased quantities of tea and gur were available for consumption throughout the period. Statistics of the production of raw hides and skins, tanned skins, wool, copra, cocoanut oil and other raw materials are not available, and it is difficult to say whether the rise in their prices was chiefly due to scarcity conditions or other causes.

Our discussion of the rise of prices in India during the war suggests certain reflections on the quantity theory of money. Is there an element of truth in the quantity theory? Professor Fisher maintains "that one of the normal effects of an increase in the quantity of money is an exactly proportional increase in the general level of prices", and he believes that "in the past, the chief disturber of peace, so far as the purchasing power of money is concerned, has invariably, or at any rate almost invariably, been money itself, not the goods which money purchases". There are on the other hand some writers who regard the quantity theory of money as of no particular value as an explanation of the causes of the rise or fall of prices. "The price of a pair of shoes," says Laughlin, "is the quantity of gold for which it will exchange. If the expenses of making shoes increase the quantity of gold required to buy the shoes increases. The cause of

this rise lies in the conditions affecting the shoes, not in those affecting gold. The insufficiency of the quantity theory of money lies in its inability to account for important forces working on the prices of commodities through the commodities themselves. If this method of reasoning is faulty, it is improper to claim that our higher level of prices is due to inflation.[†]

Now it would be foolish for any one to say that prices do not rise or fall on account of changes in the conditions affecting the goods, but price movements may originate in causes which have nothing to do with the volume of goods though changes in the quantity of circulation can affect prices only through the channels of supply or demand. At the same time we should remember that while a considerable increase in the money supply of a country may be expected to raise prices it would not be true to say that prices would rise in the same proportion in which the quantity of money had increased.

We have seen that except in 1918/19 there was practically no shortage in the supply of food in India in any year during the war period, and that in the case of several crops the yield increased. The same is also true of raw materials generally with the exception of jute and cotton. The chief cause of the rise in the prices of manufactured goods was shortage of imports. But it has been shown that in the later years of the war though the shrinkage was serious, prices rose to a far greater extent than the shortage of supply would justify, that in the early

years of the war, though the import of cotton piece goods had fallen off prices rose very little or did not rise at all. There is very little doubt that except in 1918 19 the rise in the prices of food grains and some raw materials was not due to scarcity conditions, and that causes other than decreased supply also operated to raise the prices of manufactured goods. And if a general view of the question is taken and the rise of prices throughout the world is considered, one begins to doubt whether the rise in all prices in all countries of the world was due to such causes as decreased production of every thing or increased demand, or scarcity of shipping, or rise in wages. The view that the general rise of prices was due to some causes of a general nature such as inflation seems more reasonable. The quantity theory of money does explain something. If all prices in all parts of the world double or more than double, it is certainly worth while to inquire whether the rise may not have originated in changes on the money side of the "equation of exchange." Supposing the quantity of wheat which exchanges for a given quantity of rice remains the same, while the prices of both the articles, that is, their value in money, doubled, then unless the relation of supply and demand in both cases had altered in the same way, there would be a very strong presumption, that the cause of the rise of prices was the depreciation of money. To refuse to consider such a possibility is obviously to oppose well established methods of scientific inference.

But we must not suppose that there is any

fixed relation between changes in the supply of money and changes in prices. Professor Fisher admits that no such relation exists between money and prices in transition periods. But his distinction between transition periods and normal periods is artificial. The factors of the equation of exchange are always in a state of transition; they are never at rest. Change is the rule, a state of equilibrium an exception. It would be impossible to point to any period of time and say "This is a normal period. A ten per cent increase in the quantity of money at this time would cause an exactly ten per cent. rise of prices." Was the decade which preceded the outbreak of the world war a normal period? The great rise in our prices took place in that period. The answer is again in the negative. Changes in the quantity of money in circulation are accompanied by changes in every other factor of the equation of exchange. As a matter of fact it is difficult to conceive of any period of time in which a doubling of money would precisely double prices and make no difference to anything else. It would have that effect if "other things were equal." But in actual life other things are never equal. Abstract reasoning, which takes no account of the facts of actual life, is not only of little value, but is apt to be misleading.

What were the facts regarding the relation of money and goods in India during the war? The silver currency increased and also the paper currency. The proportion of paper money to the total circulation increased from 21.1% in 1913-14 to 22.4% in 1916-17, 27.7% in 1917-18

and 37% in 1918-19. Imports decreased and there was a shortage of all kinds of manufactured goods. At the same time the production of Indian mills and factories increased. The scarcity of shipping and the great rise in the cost of transportation, together with the diversion of capital and labour in foreign countries from productive to unproductive war employments protected Indian industries from foreign competition. The war stimulated Indian manufacturing enterprise, old businesses were strengthened and enlarged, new businesses were established. There was thus a great development of industrial activity in India during the war. The yield of the principal crops, with one or two exceptions, on the whole increased. In short everything changed during the war, nothing remained constant or fixed. It would be impossible to expect that under such conditions a given change in the quantity of metallic money should cause a proportionate change in prices. If you say that the war period was not a normal period, then I would ask you to give me a practical definition of a normal period, a definition having some relation to the concrete facts of life, not a purely theoretical conception. And if your normal period is a real period and not an imaginary one, you will find that changes in the quantity of circulation will necessarily be accompanied by changes in other factors of the equation of exchange, with the result that the doubling of the quantity of gold or silver money will not "necessarily and mathematically double prices."

Table A — Imports

		1913-14.	1913-15.
Sugar	... cwt.	17,837	11,002
Silk piece goods	... yards	27,338	17,689
Woollen piece goods	... "	27,328	12.570
Galvanized sheets and plates			
	tons	277	157
Kerosine oil	.. gals.	68,849	80,590
Printing paper	... cwt.	402	326
Salt	... tons.	606	465
Betel nuts	... lbs	127,464	147,298

into India-

(000 omitted).

1915-16.	1916-17.	1917-18.	1918-19.
12,854	10,844	10,201	10,519
25,996	19,545	18,123	17,240
4,672	8,866	9,229	5,663
54	9	5	2
68,827	49,106	31,383	12,754
320	320	189	194
548	445	336	420
131,111	128,277	115,616	142,527

Table B — Exports

		1913 14	1915 16
Rice not in the husk	tons	2 419	1 538
		1 202	706
Wheat		79	53
Wheat flour		69	23
Gram		1 685	2 104
Jwar and Bajra	cwts	3 808	586
Barley		57	28
Maize		10 626	10 349
Cotton		4 303	2 828
Jute	bales		
Linseed	tons	413	321
Groundnuts		278	138
Groundnut cake		62	64
Groundnut oil	gals	988	223
Rape seed	tons	249	96
Mustard seed		5	2
Rape and Mustard oil	gals	407	413
	tons	112	46
Sesame		208	188
Sesame oil	gals		
Indigo	cwts	10	17
Tea	lbs	289 473	300 733

from India

(000 omitted).

1915-16.	1916-17.	1917-18	1918-19.
1,339	1,584	1,910	2,017
625	748	1,454	476
58	70	71	30
32	38	327	282
836	726	306	157
3,315	4,190	7,174	4,527
81	497	1,820	275
8,853	8,505	7,308	3,679
3,360	3,022	1,557	2,229
192	399	146	292
175	147	115	17
82	54	50	56
373	982	1,057	590
95	122	59	79
3	6	1	1
465	574	488	265
13	83	16	2
141	219	240	112
41	34	31	32
338,470	291,402	359,174	323,659

Table C.—Yield of Principal Crops

		1913-14.	1914-15.
Rice	... (1000 tons)	28,790	27,242
Wheat	..."	8,358	10,087
Jwar	..."	4,040	5,161
Bajra	..."	1,979	2,606
Maize	..."	2,084	2,082
Barley	..."	2,681	3,061
Gram	..."	1,937	3,841
Sugarcane	..."	2,291	2,483
Tea	... (million lbs)	307	313
Cotton	... (bales, lacs)	51	52
Jute	..."	89	104
Linseed	... (1000 tons)	386	397
Rape and mustard seed	..."	1,087	1,219
Sesame	..."	403	551
Groundnut	..."	748	947
Indigo	..."	26	25

Capital Crops in India

1915-16.	1916-17.	1917-18.	1918-19
32,831	34,791	36,249	23,672
8,652	10,234	10,162	7,407
6,040	5,119	4,485	3,406
2,379	2,890	2,133	1,387
2,502	2,344	2,415	1,770
3,164	3,331	3,328	2,782
3,428	4,216	4,427	1,920
2,634	2,731	3,311	2,337
372	368	372	381
37	45	40	37
73	83	89	69
476	526	515	229
1,102	1,191	1,153	759
482	513	381	258
1,058	1,196	1,057	490
65	55	126	44

Table D - Percentage

	1913 14	1914 15
Rice	8 4	5 6
Barley	7 08	1 08
Jwar and Bajra	1 4	1 4
Wheat	15 3	7 5
Gram	3 5	1 2
Maize	0 1	0 07

of exports to production

1915 16	1916 17	1917 18	1918 19
4 1	4 6	5 3	8 5
6 1	7 8	13 3	8 4
05	04	02	01
8 2	8 0	15 0	6 8
1 7	2 0	16 9	15 1
02	1 06	3 8	08

Table E — Percentage of increase (+)

	1913 14	1914 15
Wheat	100	+21
Rice	100	-5
Barley	100	+28
Jwar	100	+32
Bajra	100	+98
Gram	100	-1
Maize	100	+7
Gur	100	+2
Tea	100	+2
Cotton	100	+17
Jute	100	+3
Linseed	100	+12
Rape and Mustard seed	100	+37
Sesamum	100	+27
Groundnut	100	-6
Indigo	100	

or decrease (-) in production

1915-16	1916-17	1917-18.	1918-19
+4	+22	+22	-12
+14	+21	+26	-18
+18	+24	+24	+4
+50	+27	+11	-16
+26	+46	+8	-30
+77	+117	+128	-1
+20	+12	+16	-15
+15	+19	+45	+2
+21	+20	+21	+24
-27	-12	-22	-27
-18	-7	..	-22
+23	+36	+33	-41
+1	+9	+6	-30
+19	+27	-5	-36
+41	+60	+41	-36
+16	+265	+385	+70

Table F.—Index Numbers
Average of 1900-1009

Articles.	1913	1914
Wheat	107	118
Barley	115	134
Rangoon Rice	124	113
Linseed	106	113
Til	142	134
Mustard and rape seed	126	128
Groundnuts	129	135
Cotton seed	124	117
Copra	148	148
Cocoanut oil	152	144
Raw cotton (Brozeh)	134	126
Indigo	85	100
Tanned hides, (cow)	138	161
Wool	114	116
Coffee	127	114
Manganese ore	126	128
Cotton yarn (Indian made only)	130	120
Cotton piece goods (Indian made only) —	124	124
Grey	103	94
White	117	108
Coloured, printed or dyed	115	109
Average—Cotton piece-goods	209	159
Rubber, raw	117	111
Castor seed	127	125
Average	...	...

of Wholesale Prices in India

=100. Class 1 (a).

1915	1916	1917	1918	1919
146	128	130	149	211
136	137	126	136	214
116	101	93	88	131
94	107	116	98	254
110	105	107	156	239
115	101	102	115	233
91	111	101	108	262
92	119	118	163	252
180	154	150	187	219
127	138	139	118	173
89	127	200	283	276
394	394	326	171	226
179	171	184	217	180
118	153	146	154	166
116	112	111	100	126
126	168	148	151	146
93	119	186	309	341
108	100	139	216	278
56	66	57	67	91
17	99	108	139	159
94	88	101	144	176
141	124	115	105	93
98	112	130	174	248
149	134	138	155	205

PRICES DURING THE WAR

Class

Articles	1913	1914
Raw jute	174	179
Manufactured jute gunny bags	148	161
Hessian cloth	156	138
<i>Average</i>	152	49
Raw hides —	171	171
Buffalo	1 2	126
Cow	141	148
<i>Average</i>		
Tanned skins —	137	126
Goat	148	143
Sheep	14	134
<i>Average</i>	28	138
Tea	121	134
Mica	56	36
She lac		
Raw skins —	111	99
Goat		
<i>Average</i>	12	135

1 (b)

1915	1916	1917	1918	1919
121	132	132	117	219
147	158	166	256	226
149	165	161	426	222
148	161	163	341	224
138	130	156	119	128
96	79	77	100	114
117	113	131	109	121
112	171	182	238	439
131	194	209	241	354
121	182	195	239	396
178	158	141	131	124
128	51	159	250	261
38	51	109	130	158
71	99	125	94	201
119	137	150	191	222

	Class II		1913.	1914.
Country rice	117	126
Jwar	118	123
Bajra	123	130
Maize	104	138
Ragi	136	136
Gram	99	134
Dal, arhar	91	125
Ghi	142	132
Raw sugar, gur	99	101
Coal	145	147
Country tobacco	142	144
Country salt	108	111
Turmeric	113	86
Average	118	126

1915.	1916.	1917.	1918.	1919
128	127	110	101	178
111	96	102	171	300
124	133	113	177	321
143	121	112	149	227
136	117	128	137	309
155	128	116	125	226
141	138	112	116	217
124	134	150	162	204
131	140	132	128	167
114	101	139	168	149
163	143	152	158	192
157	188	298	496	330
88	122	164	178	165
132	130	141	174	230

Class III	1913	1914
Imported cotton goods —		
Grey shirtings	123	121
mulls (dhooties)	128	117
Bleached shirtings	106	98
Average	119	113
British cotton yarn	119	122
Java sugar	101	87
Woollen piece goods	104	111
Silk	98	101
Galvanized corrugated sheets	102	95
Kerosine oil —		
American (Chester)	114	118
Burma (Victoria)	112	112
Average	113	115
Printing paper	94	89
Betel nuts	95	118
Liverpool salt ex duty	101	96
Average	107	107

1915	1916.	1917	1918	1919
115	132	176	300	334
102	124	181	136	36
93	121	145	279	317
103	126	184	294	332
106	141	199	343	358
147	175	147	158	232
143	180	175	295	423
102	136	141	201	242
122	190	326	422	347
118	136	160	209	257
112	112	122	169	184
115	124	141	189	210
99	144	240	364	312
146	133	177	177	182
237	262	365	511	338
126	153	262	287	296

Table G.—Growth of business in India

	1913	1914	1915	1916	1917	1918
Foreign trade value calculated at prices of 1913 14 (1 000 £)	230 542	179 705	80 836	18 972	13 545	137 543
Index number	100	73	78	79	71	60
Tonnage of vessels entered and cleared with cargo Foreign shipping (1 000 tons)	15 037	11 024	10 175	9 940	9 908	8 840
Index number	100	73	68	66	66	59
Tonnage of coasting shipping entered and cleared with cargo (1 000 tons)	31 494	23 822	18 960	16 032	12 595	14 246
Index number	100	76	70	57	60	45
Island trade imports and exports (cwt millions)	1 356	1 267	1 198	1 352	1 346	1 375
Index number	100	97	96	100	100	102
Freight carried by Rys (ton miles) crores	1 562	1 573	1 76	1 983	2 101	2 234
Index number	100	98	110	127	135	141
PRODUCTION OF—						
Raw jute (bales, lakhs)	89	104	73	83	89	67
Index number	100	117	82	93	100	78
Raw cotton (bales lakhs)	5	52	37	45	40	37

Index number	100	102	73	78
Cotton mfd. in India (million lbs)	957	929	1,075	1,059
Index number	100	97	112	109
Rice, (1,000 tons)	28,790	27,242	32,831	34,791
Index number	100	95	114	127
Wheat (1,000 tons)	8,358	10,087	8,652	10,234
Index number	100	122	104	122
Tea (million lbs)	307	313	372	368
Index number	100	102	111	120
Oil seeds (1,000 tons)	1,876	2,167	2,460	2,230
Index number	100	115	110	118
Coal (1,000 tons)	16,208	16,464	17,104	17,254
Index number	100	102	106	106
Iron ore (1,000 tons)	371	442	390	412
Index number	100	119	105	111
Petroleum (million gals)	278	259	287	297
Index number	100	93	103	107
Manufactured jute, exports of	369	398	794	805
Gunny bags millions	100	108	215	218
Index number	100	100	112	116
Gunny cloth and canvas, (million yds)	1,061	1,057	1,192	1,231
Index number	100	100	112	116
General index number of growth of business	100	99	103	109

Indian Currency before the War.

INDIAN CURRENCY BEFORE 1893

The rupee was established as a standard coin throughout the territories belonging to the East India Company in 1835. Before that date a great variety of gold and silver coins circulated in different parts of the country, silver rupees being used chiefly as standard money, while the value of gold coins depended upon the market price of gold. The circulation of several denominations of coins in the country caused great inconvenience to the trading community and to the Government, and we find the Court of Directors, in their Despatch dated 25th April 1806, approving the recommendations of their officers in India "for the adoption of one general system for the formation of the coins for the currency of the whole of our possessions on the continent of Asia," for they were "fully satisfied the evils complained of can only be removed by the introduction of a gold and silver coinage of one weight and fineness, such coin to become the universal measure of value for British India." No less than 27 varieties of rupees were current in Bengal in about 1793; and some idea of the currency of the Punjab at the time of the in-

roduction of the Company's rupees into the Province can be gained from the following extract from a Financial Letter from the Government of India to the Court of Directors, dated 7th July 1849 :—

" Lieutenant Colonel, now Sir Henry Laurence, reports that before the time of Ranjeet Singh the currency of the Punjab was in a very confused state. Ranjeet Singh closed all the mints, except those at Lahore and Amritsar, where was first coined the *nanakshahiee* rupee. He did not, however, proscribe the circulation of the pre-existing coins, and it was only in 1847 that by Colonel Laurence's recommendation a new mint was opened at Rawalpindi for the express purpose of coining the old rupees, of various denominations, into *nanakshahies*. When the Company's rupee was first introduced in any numbers into Lahore at the time of Mr. Macnaghten's visit, there was no fixed value for it, and the Sepoys were glad to get 15 or 15½ annas for their rupee ; but when the British troops occupied the city in 1846 the shroffs could only make a profit of two annas per cent. by changing Company's rupees, and now the lowest premium which the Company's rupee bears with the *nanakshahiee* is Rs. 1-8 per cent. Colonel Laurence speaks of the *nanakshahiee* as the national currency of the Punjab ; it is divided into three series, called the *poranah*, coined from 1841 to 1869 (1796 to 1814 A. D.), the *chulme* coined from 1869 to 1879 (1814 to 1824 A. D.), the *chalta*, coined since 1879 (1824 A. D.), the *poranah* is at a discount with the *chulme* of

Rs. 1.8 per cent., with the *chitala*, of two rupees, with the Company's rupee of Rs. 3. 8., the *chulme* is at a discount with the *chitala* of 8 annas per cent., with the Company's rupee of two rupees per cent., the *chitala* is at a discount with the Company's rupee of Rs. 1. 8. per cent. But all these coins are really of greater intrinsic value than the Company's rupee, and Colonel Laurence traces the cause of the artificial value given to the Company's rupee over the *nawabek* and the *chulme* to the fact that neither of those coins are received at the British treasuries, and that, therefore, native merchants wanting bills on the provinces are obliged to take either *chitala*, *nawabshaheri*, or Company's rupees to the Treasury."

In their Despatch of 1806 the Court of Directors clearly endorsed the principle that "the money or coin which is to be the principal measure of property ought to be of one metal only," and decided that for India such coin must be of silver. The standard weight of silver coins issued from the mints of the three Presidencies was as follows.—

Calcutta Sicca rupee	..	179 $\frac{1}{2}$ grains
Madras Arcot rupee		176 $\frac{1}{2}$ "
Bombay rupee		179 "

The weight of the silver coin originally issued from the Moghul mints was one sicca, or 10 *masa* = 179 $\frac{1}{2}$ troy grains. "We should be inclined," wrote the Court of Directors, "to propose this weight for the coin under consideration, did we not think it would answer a good

purpose to fix the gross weight in whole numbers, we should therefore prefer the weight of 180 troy grains as the nearest to the sicca weight, and in so doing we are not aware of any inconvenience resulting therefrom at either of our presidencies, but we are rather inclined to think the measure will be found useful, inasmuch as it will produce a greater degree of simplicity in the valuation of the coin in respect to other money.

The Act No XVII of 1835 made the silver rupee of 180 troy grains eleven twelfths fine the standard throughout British India. The weight and the fineness of the rupee have remained unaltered since 1835.

The Position of Gold in the Currency

By section 9 of the Act of 1835 it was enacted that "no gold coin shall henceforward be a legal tender for payment in any of the territories of the East India Company." The Court of Directors, however, in the Despatch of 1806 had stated that "it is not by any means our wish to introduce a silver currency to the exclusion of the gold, where the latter is the general measure of value, any more than to force a gold coin where silver is the general measure of value." In Section 16 of the Despatch they clearly defined their attitude towards the use of gold as currency —

"Although we are fully satisfied of the propriety of the silver rupee being the principal measure of value and the money of account, yet we are by no means desirous of checking the circulation of gold but of establishing a gold coin on a principle

fitted for general use. This coin, in our opinion, should be called a gold rupee and be made of the same standard as the silver rupee, viz., 180 troy grains, gross weight, and 165 troy grains, fine gold, also divided into halves and quarters, so that the coins of both gold and silver should be of the same denomination, weight and fineness."

In view of this pronouncement it is somewhat difficult to understand why the gold pieces of 5, 10, 15 and 30 rupees coined under the Act of 1835 were deprived of the legal tender quality. By a proclamation issued in 1841 officers in charge of public treasuries were authorised to receive the gold coins struck under the provisions of the Act of 1835 at their denominated value, until they should have passed a certain limit of lightness, when they were to be taken as bullion only, by weight. It is also not clear what was the precise object in requiring public treasuries to receive gold coins which were no longer legal tender. It was certain that so long as the market price of gold exceeded the denominated price of the coin in silver, no gold would be brought to the Government, but if the market price of gold fell below the silver denomination of the coin, gold would accumulate in Government treasuries and this gold could not be used by Government in making payments to the public as it was legal tender. Such was actually the result of the proclamation of 1841. In a letter to the Court of Directors, dated 2nd July 1852, the Government of India pointed out that there was 30 lakhs of rupees worth of gold in Government treasuries which was of no use to them. "This amount in

itself," they said, "would not have embarrassed us; though obviously there is no advantage in being in possession of so large an amount of coin of which we can make no use in aid of the public expenditure in India. But we have reason to believe that speculations are already in progress for forming connexions with Australia for the express purpose of bringing up gold when the direct line of steam communication is opened next year, in order to take advantage of the Government proclamation of 1841, by which gold is still receivable at 15 rupees to the so-called gold piece, and in this case we run the risk of being seriously inconvenienced by an excessive stock of this metal."

The Government of India proposed that the proclamation of 1841 should be withdrawn. The Court of Directors agreed with the Government of India that it was important at once to check the receipt of gold into the Indian treasuries, but they pointed out that the proclamation of 1841 was not intended to bear the interpretation which the Government of India had given to it. It did not, they said, impose upon the officers in charge of treasuries an obligation to give silver for gold, "but only to authorise them to receive gold in exchange for silver if it suited their convenience to do so." By a notification issued in December, 1842, it was declared that beginning with January 1853, "no gold coin will be received on account of payments due, or in any way to be made, to the Government in any public treasury within the territories of the East India Company." Golds however, continued to be received into the mint, for coinage under the Act of 1835.

While the action taken by the Government tended to discourage the use of gold as currency, the fall in its price, consequent upon the discoveries of gold in Australia and California, considerably increased the demand for gold. Memorials were submitted to Government by various Chambers of Commerce praying for the introduction of a gold currency. The more important proposals made with a view to encourage the use of gold as currency were (1) the introduction of the sovereign or some other gold coin which should circulate at its market price from day to day measured in silver; (2) the introduction of the English sovereign as legal tender for ten rupees, but limited in amount to 20 rupees; and (3) the change of the monetary standard from silver to gold, silver tokens to be used as subordinate coins. These proposals were examined by Mr. James Wilson in a minute entitled "Proposals to introduce a Gold Currency in India," dated 25th December 1859. He thought, and ring tly, that a gold coin whose value as measured in silver was fluctuating from day to day, could not be used as currency. To the proposal to permit the circulation of the sovereign to a limited extent, of 20 rupees, his objection was that the sovereign would not circulate so long as its value was above the ratio at which it was made legal tender, and that every effort would be made to force it into circulation if its value fell below that ratio. The result would be that those who received the sovereign in payment of small sums (railway companies and small dealers, for example), would not be able to use them in

making large payments without risk of loss. This objection did not apply to a change in the standard from silver to gold, and Mr. Wilson admitted that if Government "had to begin *de novo*, convenience would point to a gold standard with silver token coins as the best" But he thought that in a country where all obligations had been contracted to be paid in silver, to change the standard from silver to gold, because gold had depreciated, would be to defraud the creditor for the advantage of the debtor and to break public faith. His view was that a well-regulated paper currency was more desirable than gold in circulation, and he submitted his proposals for a Government paper currency in a separate minute

To James Wilson's plan for a paper currency it was objected that the people of India would be slow to appreciate the advantages of paper money as from times immemorial they were accustomed to the use of money of intrinsic value

The case for the introduction of gold into circulation in India was ably argued by Sir Charles Trevelyan in a minute dated 20th June, 1864. Information collected by Sir Charles Trevelyan from all parts of India showed that there was a general desire for the introduction of gold coins in India, that the people of India were well acquainted with the sovereign, and that there was every reason to think that the introduction of the sovereign would be well received and that it would circulate freely at 10

rupees. The Secretary of State, however, did not think it advisable to make the sovereign legal tender, but as an experimental measure he suggested that the sovereign and the half-sovereign should be received into and paid out of public treasuries in India for ten and five rupees respectively, and effect was given to this proposal by a Government notification in November 1864. But it was found that the rate of ten rupees to the sovereign was below the market value of the sovereign, and therefore it failed to attract sovereigns to Government treasuries. The rate was raised to Rs. 10 1/4 for the sovereign and Rs. 5 1/2 for the half-sovereign in October 1868. Shortly afterwards the gold price of silver began to fall, which entirely changed the Indian currency situation, and the Government of India adopted the following Resolution on the subject of a gold currency on 7th May 1874 —

“The expediency of introducing a gold currency having been considered, the Governor General in Council is not at present prepared to take any step for the recognition of gold as a legal standard of value in India.”

The Fall in the Gold Value of Silver.

The fall in the gold value of silver commenced in 1873, and by 1893 it amounted to 40 per cent.

Expert opinion was divided as to the causes of the fall. On the one hand it could not be denied that the production of silver had increased. The demand for silver had, at the same time, decreased owing to (a) the cessation of free coin-

age of silver in Germany, the Latin Union and Holland, and (b) diminution in the Indian demand for silver caused chiefly by increase in the sale of Council bills. It would, therefore, appear that the change in the relative values of the precious metals was due to causes affecting silver. On the other hand, there is a good deal of evidence to show that during the whole period, 1873-1893, gold was appreciating owing to causes affecting gold itself—decreased production and increased demand for industrial and monetary purposes. If the purchasing power of gold and silver in terms of commodities is considered, it is found that the fall in the gold value of silver far exceeded the fall in the value of silver as measured by purchasing power over commodities either in China or in India, while the purchasing power of gold over commodities in England increased very considerably. The movements of gold and silver prices unmistakably show that the change in the relative values of the precious metals was primarily due to the appreciation of gold, not depreciation of silver.

But whatever be the causes of the fall in the gold value of silver, its effect on Indian finance was most serious. The Home Charges amounted then to about £15,000,000 annually. The Home Charges represent a sterling obligation of the Government of India, while the revenues of the Government are collected in silver. Every fall in the gold value of the rupee thus meant a real addition to the burden of the Home Charges. Mr. R. B. Chapman, Secretary, Financial Department of the Government of India, described the

consequences to British India of the fall in the exchange value of the rupee in a note dated 13th July, 1876, from which the following passages are taken :—

" The injury to our finances hitherto is thus, mainly, if not altogether, due to the enhanced value that we have to pay in gold in England. Our obligations there have been contracted on the understanding that gold was worth about $15\frac{1}{2}$ times its weight in silver, and gold having now risen to be worth about 20 times its weight in silver, the burden of our obligations is proportionately increased. Our creditors in England, who benefit by the change, have no equitable claim to the benefit ; but unless there is some such international rectification as I have suggested, the wrong appears to be, so far, without a remedy. We have no option but to pay the gold that we have contracted to pay.

" Now there is no royal road out of this difficulty ; it must simply be faced ; we must grapple with it and overcome it, or be overcome. The facts and calculations which I have already submitted show that in order to meet the new, and grave obligations thus imposed upon it, the Government of India must, upon the assumption that the fall to 1s. 7d. only is due to a rise of the value of gold, be prepared, by increasing its receipts or reducing its expenditure, to provide, immediately, not less than two crores of rupees a year in excess of what it now has at its disposal ; and it may be, considerably more. We do not yet know the worst and cannot say when we shall know it.

"The problem then which the Government of India has to solve is *how* to effect an improvement in its financial position of two crores of rupees a year immediately, and of a further indefinite sum hereafter. The task is formidable enough to cause dismay. It will be requisite to give up all administrative luxuries and even some necessities. Schemes of retrenchment must be reconsidered which have been, in times past, taken up and rejected, and the whole energy and ability at the command of the State will be needed to effect the required curtailments. Resort must, moreover, I fear be had even to new taxation. But a loyal and combined effort must be made. I see no way of escape from the painful exigency."

Any considerable increase in taxation, however, was not practicable for political reasons and the situation was one of great difficulty.

Apart from increasing the burden of the Home Charges the fall in exchange tended to check the investment of foreign capital in India and lowered the gold value of the salaries, paid in rupees, of the European employees of the Government. It also made foreign trade a gamble in exchange.

In view of the ultimate establishment in India of the gold exchange system it is interesting to learn that as early as 1876 it was proposed to secure stability of exchange by closing the mints to the coinage of silver and giving the rupee an artificial gold value. The main features of this plan are described in the follow-

ing extract from a letter from Major-General Richard Strachey, to the Editor of "*The Pall Mall Budget*," dated 10th August 1876:—

" The problem of solution, therefore, is to introduce in India a standard of value which shall be readily commensurable with that of England, with which *country* its commercial and other transactions settled by money payments are on so vast a scale, and to place the Indian currency on a secure basis so that the fluctuations in the value of silver, which have become so excessive, shall not endanger the standard of value that has been adopted for that country. It seems probable that the required remedy may be found by adopting generally the course recommended by the Calcutta Chamber of Commerce, but with a few modifications and supplementary precautions. The first step would be to abandon the unlimited coinage of rupees on demand and to place the rupee coinage entirely under the control of the Government for which alone rupees would hereafter be struck. A corresponding restriction of the paper currency would be necessary, and the prohibition of the import of coined rupees. At the same time that the Mint was closed for silver it should be opened for gold, or, as a temporary arrangement, British sovereigns might be admitted as lawful currency at a rate to be fixed for the purpose. The intrinsic gold value of the new gold coin, or the current value of the sovereign in India, would be arranged so as to be equivalent to a gold value of the rupee of about 1s. 10½d. or 1s. 11d., which was the

value before the recent great fall in the price of silver. Currency notes would be issued against gold at the fixed rates, as heretofore against silver."

The authorities in India did not appreciate the novel idea of establishing a gold standard with a currency mainly composed of token silver rupees issued by the Government, as would appear from the following very interesting passage from a letter from R. B. Chapman to Major-General Strachey, dated 26th October, 1876:—

"I am astounded that you should propose such a tremendous heresy as a permanent divorce between the standard and the currency. Surely this is nothing in the world but an inconvertible currency, limited, it is true (though I observe that you would not even limit it absolutely), but still inconvertible. If we are to go in for an inconvertible currency, why should we go the useless expense of having it in silver, surely it would be only commonsense to go to paper at once? I have seen plainly that we must go through a period of inconvertible currency of silver with a gold standard, but I have always looked upon this as an evil of the first magnitude from which we should use every exertion to escape at the very earliest opportunity. It startles and staggers me that you should say that such a man as yourself, to say nothing of the rest of the powers that be at the India Office, should have been seduced into thinking otherwise for an instant."

Have you not altogether underrated the volume of our silver currency too? A true silver subsidiary currency must I maintain, be treated as a note currency, i.e., it must be issued only in exchange for gold, and the State should be compelled to give gold for it, at convenient centres, on demand, everywhere. Only on these conditions will a silver subsidiary coinage be on a really sound footing, and upon this footing even India will not want, I believe, more than 80 crores at the outside, if indeed she wants as much. You cannot seriously think we could *for a permanency* avoid calling in the 170 crores of rupees that we should have in excess of our wants. Nor can I seriously believe that an accurate thinker like yourself would deliberately consent to entrust to any Government on earth the power to issue *token* coinage at its discretion to pass as full legal tender. No human Government yet existed who could be trusted with such a power,"

These views found an emphatic expression in a Despatch from the Government of India to the Secretary of State dated 13th October, 1876 —

" We are thus quite aware that our standard of value might be enhanced without any immediate change in the body of our currency, and that we might, for a time, enjoy many of the advantages of a gold standard, without undergoing the expense of introducing a gold currency. But we wholly distrust the advice and conclusions of those who think that such a state of

things could be tolerated permanently, or even for any considerable length of time, in other words, that we could introduce an enhanced standard, and yet, indefinitely, escape the obligation to introduce an enhanced currency. So long as the currency of a country is out of accord with the standard, the country is exposed to all the evils of an inconvertible paper currency; the value of its money abroad differs from its domestic value, and the community is exposed to the depredations of coiners and forgers. It is not, we conceive, necessary for us to multiply arguments on this point, but we must record our deliberate conviction that, although we could hardly under any circumstances, hope to effect an enhancement of our standard of value, without being compelled to endure for a time, the evils inseparable from a currency not truly representing the standard, it would be our imperative duty to adopt immediate and definite measures to bring this state of things to an end, within a specified time, by the introduction of a sound currency, that is to say, of a currency representing the standard by its own independent value, abroad as well as at home."

The Government of India favoured the settlement of the silver question by international agreement, but they were of opinion that if an international conference failed to arrive at a satisfactory decision regarding silver, it would be necessary to stop the free coinage of silver and introduce a gold standard with a gold currency in India. An international Monetary Conference was convened at Brussels in 1892, but it suspend-

ed its labours on December 17, without coming to any definite conclusions. It was to meet again on 30th May, 1893, if the various Governments which were represented in it approved. But it never met again. A month before the meeting of the Brussels Conference the Secretary of State for India had appointed a Currency Committee, presided over by Lord Herschell, to consider the proposals of the Government of India. The Committee accepted these proposals with some modifications. Acting on the advice of the Herschell Committee, the Government closed the mints to the free coinage of silver by Act No VIII of 1893, passed on 26th June 1893. On the same date three notifications were issued, the first providing for the issue of rupees in exchange for gold presented at the Indian mints at the rate of 16d to the rupee; the second authorising the receipt of sovereigns and half-sovereigns by the Government in payment of taxes and other Government dues at 16d to the rupee, and the third providing for the issue of currency notes in exchange for British gold coin or gold bullion at the same rate.

India's Foreign Trade, 1873 to 1895

The effects of the fall in the exchange value of the rupee on India's foreign trade were forcibly described in a Despatch from the Government of India to the Secretary of State, dated 9th November, 1878:—

“The consequences of a fall in the exchange on the Import trade of India are almost equivalent to those of an Import duty of corresponding

amount. To secure the same profit in Sterling money with a falling rate of exchange, the prices of articles measured in rupees must be raised in the same proportion; sales will therefore be reduced, and the Export trade *pro tanto* checked also. It is, of course, true that the direct effect of the low exchange is to stimulate the Export trade, but the set-off caused by the opposite influence on Imports must not be overlooked in estimating the value of this one advantage of cheap silver. It is unfortunately impossible to deduce any positive conclusions from the trade returns as to the real effect of the fall in silver on the Export and Import trade of India; the disturbances due to the seasons of extreme drought, to the commercial depression, and to the political troubles which have characterised the last two or three years, have been of a nature to obscure or obliterate the results that might perhaps have been anticipated. As a matter of fact, no improvement can be traced with any confidence in the Export trade, and it remains doubtful whether the greater cheapness of the rupee (subject to the opposite influence above alluded to operating through the Imports) has had any beneficial effect at all on the trade of India."

By itself a fall in exchange tends to check imports, and to stimulate exports. To the contention that the depreciation of the currency is equivalent to a bounty on exports it is objected that the gains of the exporters are at the expense of other classes of the community, particularly the labourers. Trade returns, however,

show that during the period of the falling rupee imports into India increased by a larger percentage than the exports. The total value of imports of private merchandise in 1873-74 was 31,62 lakhs, and of exports, 54,96 lakhs. In 1894-95 imports had risen to 70,16 lakhs, or 122 per cent., and exports to 108,81 lakhs, or 98 per cent. The greater expansion of the import trade as compared with the export trade is explained by the very considerable fall in gold prices which occurred during this period. It would also seem that while a stable exchange is an undoubted convenience to trade, a country's foreign trade may prosper in spite of a fluctuating exchange.

Indian Currency, 1893 to 1898.

The 16*d* rate had been chosen as it represented the exchange value of the rupee in the years immediately preceding the closing of the mints to the coinage of silver. Government hoped to prevent a fall in exchange below 16*d*. by "starving the circulation". If, while population is increasing and trade is expanding, the growth of the currency is restricted, the effect would be to reduce the volume of the currency in relation to trade. The closing of the mints was, however, followed by a further fall in exchange, and the fall continued until the rupee touched its lowest point, 12½*d* in January 1895. This was due to several reasons (1) Some 20,000,000 rupees were coined by Government immediately after the closing of the mints. This represented silver received from banks and others shipped to India before the closing of the mints. (2) Many millions of rupees were imported into British

India, where the face value of the rupee was greater than its intrinsic value, from the Native States. (3) Rupees also came out of hoards. (4) There was an increase in the net circulation of notes as can be seen from the following figures —

Net circulation on 31st March.

	Lakhs of rupees.
1892-93	26,40
1893-94	30,41
1894-95	30,70

(5) Finally, the Council bills sold by the Secretary of State in 1894-95 amounted to about £17,000,000 as compared with £9½ millions sold in the preceding year. The effect of the increase in the sale of Council bills was to reduce the cash balances in the Government treasuries and to increase the number of rupees in circulation.

Having reached its lowest level in January 1895, the exchange value of the rupee began to rise, and in the latter part of 1897 it nearly touched 16d. The years 1895 to 1898 were a period of the appreciation of the rupee in terms of gold. The exchange value of the rupee was now completely divorced from its bullion value and fluctuated independently of the price of silver.

Between 1895 and 1898 the value of the rupee in terms of commodities also tended to rise, if due allowance is made for the severe famine of 1896. As the result of famine, the prices of food grains in 1897 rose 60 per cent. as compared with the average of 1891-95, and something more than 60

per cent. as compared with the prices in 1895. But excepting food grains, there was a clear tendency towards a fall in general prices in India. In other words, the scarcity of rupees which was an important factor in raising the exchange value of the rupee, also caused the rupee to appreciate in terms of commodities. Another effect of the relative contraction of the currency was the rise in the price of capital or the rate of interest. The average rate of discount at the Presidency Bank of Bengal during the five years preceding the closing of the mints was 5·0 per cent.; during the quinquennial period ending 1898 the average rose to 6·2 per cent.

The Proposal to Reopen the Indian Mints to the Coinage of Silver.

In August 1897 the Government of India were asked by the Secretary of State whether they were in favour of reopening the Indian mints to silver if France and United States of America opened their mints to silver as well as gold. The Government of India saw no very good reasons for adopting the course suggested. They pointed out that the return to silver monometalism would cause an intense disturbance of trade, and in case the experiment failed, the whole cost of failure would have to be paid by India alone. Further, international bimetallism could not succeed without the co-operation of the United Kingdom, and since the United Kingdom was not prepared to change her monetary standard, the best possible course for India was to link her currency system with that of the United Kingdom, the country with which her trade and financial

connections were most intimate. The Government of India finally declined to give the undertaking desired by France and the United States. In view of the fact that their currency policy had succeeded in arresting the fall in exchange, their objection to re-opening the mints to the coinage of silver, which meant a reversal of their policy, was well founded.

The Appointment of the Fowler Committee.

On the 3rd of March 1898, the Government of India sent a communication to the Secretary of State urging the establishment of the gold standard in India. In paragraph 26 of their Despatch the Government of India said —

“ We believe that the effective introduction of the gold standard will be welcomed by the banking and mercantile communities and by the public of India. It has indeed been pressed upon us strongly by the Bengal and Madras Chambers of Commerce and in the press that the time has arrived to put an end to the uncertainty and fluctuations of exchange, and the discussion in the Bombay Chamber of Commerce on February 9 indicates that the members of that Chamber share this opinion. We think, therefore, that we may expect their support in the measures we propose, though neither the Bengal Chamber of Commerce nor the Bombay Chamber has declared in favour of any particular scheme to secure the object, and the Madras Chamber has supported, with some modifications, the proposals of Mr. Lindsay, to which we allude below. Accordingly, we strongly urge that no time should be lost by Her Majesty's Government in giving effect to our proposals.”

This communication led to the appointment of the Fowler Committee. At the time when the Despatch of March 3rd was written, the exchange value of the rupee was still somewhat less than 16d. The Government of India proposed to raise exchange by reducing the volume of the silver circulation and replacing the silver withdrawn from the circulation by gold. "The necessary condition of a fixed rate of exchange between two countries," they said, "is that, when the currency of one of them becomes redundant as compared with that of the other, the redundancy may be relieved by the withdrawal, for a time, of the excess coin, and we wish therefore to reach the condition in which our circulating medium (using that term in its widest sense, as embracing not only active circulation from hand to hand, but the inactive reserves of banks and of the Treasury and the like) is not composed wholly of silver coin which has no value outside the country, but contains also a margin of gold which is capable of being used elsewhere as coin, and will therefore in natural course flow to where it is most wanted."

But how was the rupee circulation to be reduced? The Government of India said.—

"The mere reduction of circulation might be carried out in the same way in which it was effected in 1893, namely by abstaining from drawing Council bills, until we have an accumulation of, say, twenty crores in excess of our ordinary balances. But this procedure would be both costly and, as we believe, ineffective; in the first place, the permanent locking-up of twenty crores

of rupees would cost us in the interest on that amount, or on the amount of gold borrowed in England during the suspension of drawings, and in the second place, the existence of this accumulation of silver coins would be a perpetual menace to the exchange market, and would entirely prevent any confidence in the future of the rupee. We must not only withdraw the amount from circulation, but we must show by the method we adopt that our intention is that it should cease to exist in the form of coin, and that its place as coin is to be taken by gold. Our proposal is therefore to melt down existing rupees, having first provided a reserve of gold both for the practical purpose of taking the place of the silver, and in order to establish confidence in the issue of our measures."

The Fowler Committee rejected the proposal to melt down rupees, but before the Committee made its report the rupee had risen to 16d., and the Government of India themselves, in the altered circumstances, would not have recommended that measure. The main recommendations of the Fowler Committee were that the sovereign and the half-sovereign should be declared legal tender throughout India at 15 rupees per sovereign, and that a gold standard, with its "normal accompaniment," a gold currency, should be established in India. The Committee also recommended that "fresh rupees should not be coined until the proportion of gold in the currency is found to exceed the requirements of the public," and that "any profit on the coinage of rupees should be kept in gold as a special

reserve entirely apart from the Paper Currency Reserve and the ordinary Treasury balances. The reserve was to be used for maintaining exchange in the manner explained in the following passage —

Although the Government of India should not in our opinion be bound in law to part with its gold in exchange for rupees or for merely internal purposes we regard it as the principal use of a gold reserve that it should be freely available for foreign remittances whenever the exchange falls below specie point, and the Government of India should make its gold available for this purpose when necessary under such conditions as the circumstances of the time may render desirable and when it has accumulated a sufficient gold reserve and so long as gold is available in its Treasury it might discharge its obligations in India in gold instead of in rupees

The Lindsay scheme for the introduction of gold standard without a gold currency was rejected by the Fowler Committee

The Government of India accepted the recommendations of the Committee. The sovereign was declared legal tender. The Gold Standard Reserve was instituted and active steps were taken to encourage the use of gold as currency. Arrangements were also made for the coinage of gold in India but the scheme was dropped when it was nearly complete in 1907. The results of encouraging the use of sovereigns as a medium of circulation were however considered to be unsatisfactory and the Government of India

resumed the coinage of rupees on a considerable scale in 1900.

The Gold Exchange Standard.

Though the Government of India fully intended to carry out the recommendations of the Fowler Committee, the Indian currency system has not developed along the lines recommended by that Committee. The main features of our pre-war currency system were essentially those of Mr. Lindsay's scheme.

The central idea of Mr. Lindsay's plan is that gold is not required for internal circulation but for the payment of international indebtedness. For maintaining exchange it is, therefore, sufficient if the national currency is convertible into gold at a constant rate for meeting sterling obligations abroad. When Council bills are sold in London, gold is deposited in the reserves kept there and rupees are issued in India, and the rupee circulation increases. The circulation automatically contracts when bills are sold in India to meet an unfavourable balance of trade. The rupees obtained for bills are withdrawn from the circulation and gold is paid out of the reserve in London. The Gold Standard Reserve, (Mr. Lindsay's "Gold Conversion Fund") is kept in London, as gold is really required only for the settlement of the balances of India's foreign indebtedness, and London is an important centre for the settlement of international indebtedness. These are the main features of Mr. Lindsay's scheme. Several objections were raised against the scheme. The Government of India in their

Despatch of 3rd March 1898, gave as one of their main reasons for deciding not to adopt the scheme, that it would involve them "in a liability to pay out gold in London in exchange for rupees received in India to an indefinite extent" Mr Lindsay's reply to the objection was that Government would be involving themselves in a greater liability by undertaking to give gold in India. A second objection to the scheme was that the location of the Gold Standard Reserve in London would excite distrust and suspicion. "A gold reserve," said Sir James Westland in his memorandum on the scheme, "intended to support the introduction and maintenance of a gold standard in any country ought to be kept in the country if it is to produce its full effect in the way of establishing the confidence which is almost indispensable to the success of the measure" Mr Lindsay, however, thought that the foreign capitalist would have greater confidence if the reserve was kept in London "It is only people who send out capital to India that are concerned in the matter, the people who work with local capital in India will be very much in the same position as they are at present. The token rupees are all they want."

The chief difference between Mr. Lindsay's plan and the measures proposed by the Government of India was that the former provided for the contraction and expansion of the currency by the withdrawal of rupees from, and the issue of rupees into circulation, while the latter recommended the adoption of the principle of free in-flow and out-flow of gold. If there was no fresh

coinage of rupees, the demand for additional currency caused by the growth of trade would be met by the issue of gold coins ; if at another time the currency became redundant, the excess would be got rid of by the exportation of gold. Mr. Lindsay's plan, it was also pointed out, invested the Government with some degree of control over the volume of the rupee currency, for new rupees were to be coined from bullion bought at the discretion of the Government. " This is not a feature of the plan," wrote Sir James Westland, " that can commend itself in principle, for the regulation of the sole full legal tender currency of a country should be entirely automatic and not in any degree dependent upon the discretion of the Administration."

Indian Currency from 1898 to the Outbreak of War.

The chief matters of interest in our currency history during this period are the investment of the Gold Standard Reserve in securities in London, the formation in India in 1906 of a rupee reserve as part of the Gold Standard Reserve, the diversion in 1907 of profits on the coinage of rupees for capital expenditure on railways and the sale of sterling drafts by the Government of India in the exchange crisis of 1907-08.

In 1905, and again in 1906, some difficulty was felt in meeting the demand for rupees in India and this led to the formation of a special rupee reserve which could be utilised for preventing exchange from rising above 1s. 4d. At first

the reserve was held inside the Paper Currency Reserve in the form of silver ingots and then in partly coined rupees, but in 1900 it was decided to hold it in the form of coined rupees only. But as the reserve was needed for preventing the rupee from rising to a premium over 1s 4d, its name was changed to the Gold Standard Reserve, which now consisted of two portions, one held in the form of sterling securities in London, and the other in rupees in India. The rupee branch, like the sterling branch, of the Reserve, consisted of the profits on the coinage of rupees.

In 1907 a Railway Committee appointed by the Secretary of State recommended that £1,000,000 out of the profits on the coinage of rupees in 1907 should be devoted to improvements for Indian railways. The Secretary of State went further than the Committee and decided that for the future one half of any profits on the coinage of rupees should be used for capital expenditure on railways until the Gold Standard Reserve reached £20,000,000. It was intended that after that total had been reached, the whole of the profits on silver coinage should be diverted from the Reserve. The Government of India, however, thought that the sterling portion of the Reserve should be allowed to accumulate to £20,000,000 before any sums were diverted from it. In reply to a communication from the Government of India on the subject, the Secretary of State said "The danger which you allege of a fall in exchange I regard as illusory, having regard to the present conditions of trade, the amount of securities in

the Gold Standard Reserve and of gold in the Currency Reserve." He adhered to his decision and used £ 1,123,000 of the profits of coinage for railway capital expenditure.

But the danger of a fall in exchange was not illusory. The severe financial crisis in America in the autumn of 1907 and the consequent monetary stringency in the money markets of the world, combined with the failure of the summer monsoon in India in 1907, caused Indian exchange to fall suddenly in November of that year. The Exchange Banks asked Government to sell telegraphic transfers on London at 1s. 4d. per rupee, but the Government, after consulting the Secretary of State, refused. The Government also refused to give gold for export from the Paper Currency Reserve in larger quantities than £ 10,000 to any one individual in one day. The exchange continued to fall and on November 28th it fell to 1s. 3½d. Indian importers began to buy British Postal Orders for £ 10,000 and other large sums as a means of making sterling payments, and then the Secretary of State urged the Government of India to give gold for export. The Government of India also informed the Exchange Banks on 7th December that, should it become necessary, they would offer for tender in India sterling exchange on London. On 26th March 1908 sterling bills were first sold in India, and they continued to be sold till 11th September 1908. In all £ 8,058,000 was withdrawn during this period from the Gold Standard Reserve to meet the bills.

The crisis of 1907-08 showed that strong

gold reserves were essential for the maintenance of exchange. During the crisis £ 4,179,000 was withdrawn by the public from the Paper Currency Reserve, while only £ 250,000 was exported on private account. Another lesson taught by the crisis was "the desirability of formulating in advance and giving publicity to the policy which it is intended to pursue in a crisis". "It is almost as important," wrote the Chamberlain Commission, "that the general public should have confidence in the determination of the Government effectively to use their resources to maintain the rupee at 1s 4d., as it is that the Government should have the necessary resources for so doing."

The Chamberlain Commission.

The Chamberlain Commission was appointed in April 1913 to consider, among other matters, "the measures taken by the Indian Government and the Secretary of State for India in Council, to maintain the exchange value of the rupee in pursuance of, or supplementary to the recommendations of the Indian Currency Committee of 1898, more particularly with regard to the location, disposition and employment of the Gold Standard and Paper Currency Reserves." The Commission approved of the measures adopted by the Government in order to maintain the exchange value of the rupee, though these measures were "less in pursuance of the recommendations of the Committee of 1898 than supplementary to them." This is shown by the fact that the Government abandoned the attempt to encourage the use of sovereigns in India, and

kept the Gold Standard Reserve in London for the support of exchange. The Commission was not in favour of introducing a gold circulation in India. "The establishment of the gold value of the rupee on a stable basis," they wrote, "has been and is of the first importance to India," but gold in actual circulation is of little use for the support of exchange. Further, they tried to show that the attempt to encourage the circulation of gold would necessarily weaken the gold reserves of the Government, and thus make it difficult for Government to maintain exchange in a time of crisis. To the objection that without gold in active circulation India's currency system would remain a "managed" system, their reply was that there was no "essential difference between the power to import sovereigns at will and the power to have gold coined into sovereigns in India." They finally concluded that "It would not be to India's advantage to encourage the increased use of gold in the internal circulation." In paragraph 76 of their report, the Commission said —

"To sum up, our view is that India neither demands nor requires gold coins to any considerable extent for purposes of circulation (as opposed to saving or hoarding), that the most generally suitable media of internal circulation in India are at present rupees and notes, and that the Government should, as opportunity may offer, encourage notes, while providing—and this is the cardinal feature of the whole system—absolute security for the convertibility into sterling of so much of the internal currency as may at any

moment be required for the settlement of India's external obligations."

As regards the Gold Standard Reserve, the Commission did not fix any limit up to which the Reserve should be accumulated. They recommended that the profits on the coinage of rupees should for the present continue to be credited exclusively to the Reserve, and that Government should aim at keeping one half of the total Reserve in actual gold. The rupee branch of the Reserve they considered to be 'responsible for much confusion and doubt as to the efficiency of the Reserve' and they recommended its abolition. They did not consider it necessary that the use of the Reserve should be regulated by statute.

"But we advise," they said, "that the Government should make a public notification of their intention to sell bills in India on London at the rate of 1s. 4d whenever they are asked to do so (as was actually done in 1908 and confirmed in 1909) to the full extent of their resources. We believe that the knowledge that such exchange can be purchased at any time will do much by itself to inspire confidence, and so to reduce the actual demand for drafts on London, and to prevent that feeling of panic which is liable to accompany and to aggravate periods of financial strain. With the Reserve for the support of exchange so strong as it will, we hope, prove if our recommendations are accepted, we do not think that there is any reason to fear that in undertaking this liability the Government of India would be in any danger of being unable to carry out their obligation."

As regards the sale of Council drafts in London, the Commission, while recognising that the Secretary of State sells Council drafts, not for the convenience of trade but to provide the funds needed in London to meet the requirements of the Secretary of State on India's behalf, did not recommend "any restrictions upon the absolute discretion of the Secretary of State as to the amount of drafts sold or the rate at which they are sold, provided that it is within the gold points."

Only partial action could be taken by the Government on the Report of the Chamberlain Commission, as the war broke out shortly after the publication of the Report in 1914. Government issued a notification in 1914 guaranteeing to issue sterling drafts on the Secretary of State in London. The silver branch of the Gold Standard Reserve was also abolished in 1914 by the transfer of 6 crores of rupees held in the silver branch to the Paper Currency Reserve for an equivalent amount of gold.

Indian Currency since the War.

Having learnt in the crisis of 1907-08 how to use their gold reserves for the support of exchange, Government were fully prepared to meet the weakening of exchange which was the immediate result of the outbreak of war. Between 6th August, 1914 and 28th January, 1915, Reverse bills were sold to the extent of £8,707,000. Reverse bills were again sold in 1915-16 (£4,893,000) and between November 1918 and April 1919 (£5,465,000). Apart from these temporary periods of weakness exchange was strong throughout the war. As a matter of fact, our currency troubles during the greater part of the war were due, not to a falling rupee, but to a rupee whose exchange value rose to unexpected and unprecedented heights. Before we discuss the causes of the abnormal rise in the rupee which commenced in 1917, however, it seems desirable to explain briefly the nature and operation of the gold exchange system in India before the war.

A gold exchange system is an artificial system in the sense that the rate of exchange under this system does not depend upon the intrinsic value

of the silver coin. Before 1893 every fall in the price of silver reduced the exchange value of the rupee, but during the whole period between 1899 and 1916, the fluctuations in the price of silver exercised no influence upon the course of the rupee exchange. Exchange rose and fell according to the supply of, and the demand for, foreign bills. The exchange value of our rupee was thus completely divorced from its bullion value.

But it should not be supposed that as soon as a country has conferred an artificial gold value upon its silver coin, the market price of silver becomes a matter of indifference. Violent fluctuations in the price of silver in either direction would destroy the system, or make it impossible to work. The essential feature of a gold exchange system is the use, for the purposes of internal circulation, of a token coin, which is convertible into gold for foreign remittances at a more or less constant rate. When a token coin ceases to be a token coin, on account of the rise in the value of its metallic content, the gold exchange system automatically ceases to exist. It thus appears that the existence of the gold exchange system and its successful operation depend upon steadiness in the value of silver. For the purposes of the gold exchange system it is comparatively a matter of indifference whether the ratio of silver to gold is high or low, but it is not a matter of indifference whether the ratio is steady or subject to frequent and violent changes. This aspect of the question was duly considered by the American Commission on Inter-

national Exchange of 1903. In the arguments submitted by the American Commission to the foreign Commissions there was a whole section devoted to "Considerations regarding the price of silver." "Whether the absolute price of bar silver be high or low", wrote the American Commission, "is a matter of comparatively slight importance, in as much as the ratio could be fixed to correspond, provided the price remains steady; but if after a ratio had been once fixed, the price were to increase decidedly (so that the bullion value of coins exceeded their nominal value) the coins would be melted down and the system would be destroyed. On the other hand, if the price of silver were to fall very low, the burden of maintaining the parity would be heavier, in as much as a large gold reserve fund might be required to maintain confidence. It is extremely desirable, therefore, especially for the countries that are somewhat weak financially, that the price of silver bullion should remain steady at a point somewhat near the ratio agreed upon."

In India attention has been concentrated on devising means for preventing the rupee from falling below a certain level. The possibility of a rise in the rupee much above its gold parity was never seriously considered by Government or any one else. This is certainly curious in view of the fact that the rise in the price of silver in 1906-07 caused the gold exchange system of several countries to collapse, though it did not affect us. The gold exchange system was introduced into the Philippines in 1903. The unit of value was the silver peso, 416 grains in weight.

"The margin between the bullion value and the money value of the 416 grains peso, at the average price of silver for February (1903) was about 32·4 per cent.", which, says Kemmerer, "to most people seemed to be a generous margin of safety." But three years and eight months later the gold exchange system completely broke down owing to the rise in the price of silver. The monetary situation was reconsidered by the Philippines Government and the Government of the United States, and after many months of deliberation it was decided to reduce the weight and the fineness of the peso, thus reducing the fine silver content of the peso by 34 per cent. and changing the ratio with gold from 32·5 to 1 to 21·3 to 1. "With this new ratio," wrote Kemmerer, "the new peso cannot be in danger of the melting pot until silver reaches approximately 45*d.*", and he thought that the peso was well protected by the large silver circulation of India and Japan. Thus Kemmerer wrote in October 1916. In less than a year, however, silver rose to 55*d.* throwing into confusion the currencies of India, the Philippines, the Straits Settlements and other Eastern countries.

The rise in the price of silver in September 1917 to 55*d.* put an end to our gold exchange system. The rupee ceased to be a token coin—there was profit in melting and exporting it. As the price of silver continued to rise, the maintenance of the old ratio, 16*d.* to the rupee, became impossible. The rise in the cost of production of the rupee compelled the Secretary of State to raise the price of rupees. The minimum rate for

Immediate Telegraphic Transfers, which was already 1s 5d., was raised to 1s 6d. on 12th August 1918, 1s 8d. on 13th May 1919, 1s 10d on 12th August 1919, 2s. on 15th September 1919, 2s. 2d. on 23rd November 1919, and 2s 4d on 12th December 1919.

A contributory cause of the rise in exchange was the strong demand for rupees due to the heavy balances of trade in India's favour. But even without the assistance of the favourable balances of trade the rise in the price of silver was sufficient to destroy our system. If the rise had occurred, not during the war but before the war, the collapse of the gold exchange system would have been as complete as it was during the war. It should be recognised that the break-down of the gold exchange system was due, not so much to war causes, as to the simple fact that the price of silver rose above the bullion par of the rupee.

When the price of silver rises so that the intrinsic value of the token coins exceeds the face value, the gold exchange system can be re-established either by raising the gold par or by debasing the token coins. The majority report of the Babington Smith Committee, appointed by the Secretary of State in May 1919 to consider the Indian currency situation, recommended the raising of the exchange value of the rupee to 2s. (gold). The chief objection to the reduction in the weight or fineness of the rupee was that it would "react gravely on the credit of the Government and possibly lead to serious social and economic consequences". The 2s rate was chosen as the Committee believed that if the exchange

value of the rupee was fixed at a figure lower than this the rupee could not be established as a token coin. The price of silver throughout 1919 was high and in February 1920 it reached the high water-mark of $89\frac{1}{2}d$, and it seemed probable that for many years to come it would remain at a high level. Recoinage being impossible, a stable gold exchange standard could be ensured only by raising exchange, and raising it enough to make the rupee safe from the melting pot.

A considerable rise or fall of exchange has an important effect upon a country's level of prices, its trade and industrial development, and its finance. The Committee carefully considered this aspect of the question. The views of the Committee on the effects of a high exchange are discussed below in an extract from a monograph on "The Currency System most Advantageous to India" which I prepared in 1920.

Effect of High Exchange on the Level of Prices in India

"As regards the effects of the rise of prices the Committee agree with the Government of India that the 'increase in the expense of living due to the high price of food-grains as also of other necessaries, such as cloth, kerosine oil, and the hardships which this increase has entailed on the poorer classes and those of fixed incomes, have been a very important factor in promoting unrest and discontent.' 'These views' write the Committee, 'are not a matter of theory alone. Disturbances have actually arisen in various parts of the country from time to time as a

result of high prices and the social and economic discontent to which they gave rise is especially serious in a country where the mass of the population is ignorant and uneducated and inclined to attribute all calamities to the action of the Government. The rise in prices in India has now reached a point at which it is injurious to the country as a whole, and we believe that any measures tending either to reduce prices or to check a further increase would be beneficial to the mass of the population.”

“It is only by discouraging exports from India and encouraging imports into India that the rise in exchange can lower prices. A high exchange penalises exports and subsidises imports. This is the effect of a high exchange upon exports and imports considered by itself. The question whether the gain of the importer or the loss of the exporter is reduced by the operation of other causes will be dealt with later on. Now the Indian consumer who is very poor and for whose benefit the Government desire to lower prices, is not interested in the prices of all articles of import and all articles of export. A poor man in India spends a very large proportion of his income upon food. That must be so as his income is very small. A man earning about Rs 15 a month with a family of five persons to support will spend about 9 to 10 rupees on wheat or rice alone. Other items of expenditure will be pulses and vegetables Rs 2, salt, spices and sugar annas 8, ghee or cooking oil about Rs 2, kerosine oil annas 4 to 8, fire wood (if not free) about Rs 2. No allowance has been made here

for house rent, clothing and foot-wear and extraordinary expenses. In the villages practically no house rent is paid. Clothing will cost in a year about Rs. 20, foot-wear $2\frac{1}{2}$ Rs. The expenditure, as thus estimated, is greater than the income, which means that either poor people have debts to pay or they are underfeeding themselves. In any case poor people in India have to spend the greater part of their income on articles of food. As regards clothing, it would be wrong to think that they are the chief consumers of the fine cotton, woollen and silken fabrics imported every year. They are mostly clad in garments of coarse cotton cloth made in India. Their footwear is Indian shoes, not the imported variety. It is not meant that poor people in India never buy any imported articles, but it is true that they spend a very considerable portion of their income on things that are imported. They, of course, gain if the price of kerosine oil and coarse cotton cloth falls, but the gain is small. They would gain materially if the price of atta (wheat-flour) or rice fell substantially. If they spent less on food, they would have more to spend on other necessities. After rise in the prices of food grains which placed before hardest, not so much the rise in ^{the} vision that Indian If the rise in exchange lowers ^{the} permanent injury factured goods imported into ^{at} a high level' and the middle classes will be the ^{the} export from not so much the lower classes. Till to 1913-14, exchange will discourage exports from India, enjoys reduction in the prices of all articles of export, excepting food grains and one or two other

articles, will not add much to the material happiness of poor people. It is wholly unnecessary to place an embargo upon all exports in order to increase the well being of the poorer classes. What is wanted is cheap food for the masses and not cheap articles of luxury and convenience. In view of this fact, it is pertinent to inquire whether raising the exchange is the only method of lowering the price of food, kerosine oil and cotton cloth (expenditure on which represents about 80 to 90 per cent of the income of a poor man in India). Particularly so far as cheap food is concerned high exchange is surely not the only means of securing it.

Generally speaking the method of lowering prices by means of export duties is preferable to ~~and~~ which restricts exports by raising the exchange. For, in the former case the articles whose export it is desired to restrict can be selected, the amount of the duty chosen, and the length of time during which the restriction is to be in force, determined at will.

It is argued that the rise of exchange will import and ~~and~~ export trade nor retard our industries in India spend. But if exports will not increase, how income upon imports will not increase, how income is very. If the rise in exchange will not support ~~will~~ of view of the Indian consumer, ~~will~~ rice etc fall, then there is no escape from the conclusion that the rise in exchange will injure our export trade and stimulate imports of manufactured articles of all kinds which may conceivably injure our manufacturing industries. The

position that the rise in exchange will lower prices and at the same time do no injury to our export trade and manufacturing industries seems untenable. If the foreign demand for our exports is rigid and inelastic so that the Indian producer will be able to shift the burden of the high exchange to the foreign consumer, then exports will not decrease and prices in the country cannot fall. But, as I propose to show, the foreign demand for a considerable proportion of our exports is not inelastic, and it cannot be expected that the whole of the tax which the rise in exchange places upon our growers and exporters of raw produce will be paid by foreigners.

Effect of High Exchange upon India's Export Trade.

"The view of the Babington Smith Committee is that the rise in exchange will not do India's export trade any permanent injury. They point out that India enjoys a monopoly of some articles, while in the case of some other articles, 'the world demand is insistent despite the high range of prices,' and conclude that 'exchange is only one, and not necessarily the most important factor of which account has to be taken. After careful consideration of the evidence placed before us we have arrived at the conclusion that Indian trade is not likely to suffer any permanent injury from the fixing of exchange at a high level'.

"The following tables show the export from India in the pre war years, 1909-10 to 1913-14, and in 1918-19 of (a) articles of which India enjoys a more or less complete monopoly, and (b) articles in respect of which she enjoys a modified monopoly:—

(In thousands)

Articles	1900 10	1910 11
<i>A</i>	£	£
Op um	6 209	8 509
Indigo	234	223
Myabolams	400	465
Mowa	311	207
Jute raw	10 058	10 326
Jute manufactures	11 397	11 329
Teakwood	361	579
Lac	1 847	1 428
Til	1 772	2 135
<i>Total</i>		
<i>B</i>		
Rice	12 161	15 487
Hides and skins	6 434	5 996
Oil seeds	10 777	14 716
Drugs	101	156
Spices	472	539
<i>Total</i>		
<i>Total exports of Indian merchandise</i>	122 997	137 080

of £).

1911-12	1912-13	1913-14	Average	1918-19
£	£	£	£	£
8,726	7,481	2,280	6,641	2,080
250	146	141	199	832
383	414	379	438	328
392	142	363	283	Nil
15,037	18,033	20,550	14,800	8,480
10,672	15,247	18,848	13,499	85,101
487	634	524	517	399
1,842	1,408	1,310	1,467	1,965
1,350	1,215	1,796	1,653	47
			39,497	49,232
19,846	21,703	17,787	17,287	15,450
6,295	7,819	7,790	6,867	6,228
16,830	13,665	14,842	14,166	4,429
100	124	138	128	224
619	621	609	572	728
			39,020	27,059
147,879	160,899	162,800	146,331	159,538

" The proportion of exports of Classes A and B to the total exports of Indian produce was as follows :—

	1909-10 to 1913-14. (average). per cent.	1918-19 per cent.
A	27	31
B	27	17
—	—	—
Total	54	48

" It will be noticed that the exports of jute manufactures amounted to about £ 19,000,000 in 1913-14 and £ 35,000,000 in 1918-19. It may be doubted whether the world's normal demand for jute manufactures, and even raw jute is, inelastic, the world markets for rice and hides and skins are certainly elastic. But even if we assume that the foreign demand for articles of which we enjoy a complete or a modified monopoly is absolutely rigid and inelastic, then, as shown by the figures of our export trade, there is about 50% of our trade which may suffer on account of the rise in exchange. We do not enjoy a monopoly of every thing and it is true 'with regard to the greater portion of our exports that they compete successfully in foreign markets by reason of their cheapness rather than of their quality or kind,'* from which it follows that the rise in exchange may do permanent injury to our export trade. The burden of a rising exchange is shifted to the consumer when the producers

* Government of India's Despatch on Preferential Trade, 1903

in the exporting country are in a position to control prices. It has been shown that such control of prices is possible, taking the most optimistic view of things, in respect of about half of our export trade. The conclusion therefore cannot be resisted that about half of our export trade may suffer on account of the rise in exchange.

"The possibility of injury to our export trade is a most serious fact. India is a debtor country. That is why it is important that the balance of trade should be in her favour. 'The national solvency of India', wrote the Government of India in 1903, 'depends upon the preservation of an excess of exports over imports equal to the amount of the Home Charges, that is upon maintaining a favourable balance of trade. It is therefore a vital object with us to stimulate our exports by every means in our power, to seek new markets and develop old ones, and to remove all obstacles which stand in the way of growing external trade.'

"The currency policy recommended by the Babington Smith Committee places obstacles in the way of the export trade. So far from stimulating our exports by every means in their power the Government have adopted a course which will seriously hamper the export trade. If the rise in exchange causes exports to dwindle, the maintenance of the gold exchange system will become impossible.

"The fact that the tax imposed upon native producers by the rise in exchange is not

always paid by the foreign consumer is shown by the effect that the raising of the Straits dollar to 28d. had upon the export trade of the Straits Settlements. The tin merchant was able to raise the price of tin, as the market for tin was strong. The same was true to a lesser extent of tapioca. On the other hand, pepper and gambier, two important items in the Straits Settlements export trade, had weak markets during the period of the appreciation of the dollar, and this fact accompanied by a strong competition among the producers of these articles, resulted in declining dollar prices and the imposing of the burden of the rise in exchange upon the exporter and the producer.* During the period of appreciation business in the Straits Settlements generally, excluding speculative transactions, was 'bad.' The Singapore correspondent of the *London Times* wrote in his letter of December 1905: 'Not for fifteen years has this Colony experienced such bad times and even now signs of a revival are by no means hopeful.'†

"But it will be said that the depressing effect of a rise in exchange upon trade is transitory. Sooner or later an adjustment takes place, which leaves the producer no worse off than before. Let us consider the process of adjustment. The rise in exchange will reduce the profits of Indian producers, unless they are able to control the prices of the commodities which they produce. In order to lower their costs of

* Modern Currency Reforms by E. W. Kemmerer p. 432

† *Ibid.* p. 433

production they will be forced to reduce wages. When competition among producers is weak and the demand for a given commodity is strong, the burden of the rise in exchange, as we have seen, is shifted to the foreign consumer. 'Where the supply of labour employed in the production of the commodity is excessive and the wage-earners are not organised, the burden may be shifted to the labourer. Where, on the other hand, the foreign market is weak and the labour supply limited or thoroughly organised, the burden may be shifted to the producer or the exploiting merchants'.* In order to determine who will bear the burden of the rise in exchange, in the case of commodities for which the foreign market is weak, we have to inquire whether the agricultural labourer in India is in a position to resist a fall in wages.

"Conditions of labour supply in different parts of India are not uniform, but it is generally true that in no part of the country have agricultural wages risen to the same extent as general prices. As has been explained above, the rise in the price of agricultural produce has enriched the large farmer, but the agricultural labourer has not shared in his prosperity. Our agricultural labourers are uneducated and ignorant; they are also unorganized. It is therefore not surprising that agricultural wages have risen far less rapidly than prices. The rise in exchange will not only check the upward movement of wages but may cause them to fall. The effect

* Ibid p 430

of the rise in exchange in stimulating imports and checking exports, according to the Babington Smith Committee, will no longer be operative when wages and other elements of cost have adapted themselves to the new level of exchange. The Committee clearly expect wages to fall. But they do not realise what that means to 41 millions of very poor people. The fall in wages would not matter much if agricultural wages had risen to the same extent as prices. But facts show that they have not. And before the process of adjustment in one direction is complete, deliberately to start another in the opposite direction can only mean starvation for the agricultural labourer.

Gains by Exchange

"Just as a falling exchange increases the burden of the Home Charges, a rising exchange reduces the burden. 'When the exchange value of the rupee was 1s 4d, the rupee equivalent of the Home Charges, on the basis of £ 25,000,000 a year, was 37½ crores, while if the necessary sum were remitted at an exchange of 2s. the cost would be 25 crores only, a saving of 12½ crores' (Section 53) And if the necessary sum were remitted at an exchange of 3s. the cost would be 16 crores only, a saving of about 21 crores. 'What a wind-fall,' you exclaim. The loss due to the sale of Reverse bills, and the revaluation in the rupees of the sterling investments and the gold in the Paper Currency Reserve having been deducted, the surplus may be employed in furthering the development of India or in the

reduction of taxation. 'This is an incidental advantage in fixing a high rate of exchange which must be taken into consideration.' But is it not necessary to inquire at whose cost this advantage is obtained? If the rise in exchange places surplus revenues at the disposal of the Government without doing any harm to any one, why not increase the surplus by raising the exchange to 2s. 6d, or 3s.? As a matter of fact the gains by exchange are purely illusory. They are obtained at the cost of some one, and this some one, in the first instance, is the Indian producer. No elaborate analytic reasoning is needed to show that if the Government are able to sell their rupees dear, some one, that is the India producer, sells his sterling cheap."

Indian press comment on the recommendations of the majority report of the Babington Smith Committee was unfavourable. The effect of a high exchange in stimulating imports was one of the chief grounds of objection to raising the exchange value of the rupee. A great revival of Indian industries took place during the war, of which Mr. Ainscough, British Trade Commissioner in India and Ceylon, gives an admirable account in his *Report on the Conditions and Prospects of British Trade in India at the close of the War*. The war brought into existence many new industries and proved a blessing in disguise to old industries. In the cotton industry for example, Indian mill competition both in spinning and weaving is becoming more serious. "In all branches of the trade," says Mr.

Ainscough, "greater vigilance and improved distributing organisation will be necessary and our makers and shippers will have to fight for the business in a way they have never been obliged to do before."* In so far as a high exchange encourages imports, it favours the British manufacturer at the expense of his Indian rival. "High exchange", says Mr. Ainscough, "places the British manufacturer in a more favourable condition *vis-à-vis* his competitor in India. On the whole, therefore, his material interests would appear to be best served by the fixation of exchange at as high a rate as may be possible under the circumstances"†

The report of the Indian Currency Committee was, however, well-received by the British press, as may be judged from the following extract from an article on "Trade and the new Rupee basis" in the *Times Trade Supplement* of February 7, 1920.

"Apart from the possibilities of international action, the hope of arresting sterling depreciation lies in increasing production in the United Kingdom, with consequent large shipments abroad, so that our former position as a creditor country may be ultimately restored. The immediate effect of the new sterling rate of rupee exchange should be that of stimulating our exports to India, while restricting our purchases therefrom. The report of the Committee referred to in detail elsewhere naturally avoids

laying great stress on the point, but it is one which appeals to our manufacturers, as is shown by the favourable opinions with which the recommendations have been received in the industrial North."

Government accepted the recommendations of the majority report of the Babington Smith Committee. The attempt, however, to maintain exchange at 2s. (gold) did not succeed, as is shown by the table of exchange rates given at the end of the chapter.

The history of our exchange during 1920 may be divided into three periods —

(a) From the adoption of the report of the Babington Smith Committee in February to June 24th when Government lowered the rate to 1s. $11\frac{1}{2}$ d. for Telegraphic Transfers and 1s. $11\frac{1}{2}$ d. for Deferreds.

(b) From June 24th to September 1920 when Government withdrew the sale of Reverse bills

(c) The period of uncontrolled or free exchange since September 28th.

(a) The adoption of the report of the Babington Smith Committee raised the rate of exchange from 2s. 4d to 2s. 10 $\frac{1}{2}$ d. In order to maintain the 2s. (gold) rate, it was decided to fix the rates for Reverse Councils in accordance with the ratio of Rs. 10 to the sovereign, making allowance for the depreciation of sterling on the basis of the latest rate for the dollar sterling exchange. Immediate Telegraphic Transfers were sold on 5th February at 2s. 8 $\frac{1}{2}$ d. at the following exchange rates:

the rate was raised to 2s 10 $\frac{2}{3}$ d. As the Government rate was higher than the market rate the amounts offered at these and subsequent sales were largely over subscribed. The Comptroller of Currency in his report for 1919-20 says —

'When at the commencement of February the rate for Reverse Councils went to 2s 8 $\frac{1}{2}$ d the market rate for Telegraphic Transfers on London was quoted at 2s 7 $\frac{1}{2}$ d. At these rates an overwhelming demand for sterling remittance arose and the Reverse Councils sold were insufficient to bridge the gap between the demand for sterling remittance and the demand for remittance to India. The necessary effect of the huge excess of funds seeking remittance abroad was to depress the market rate of exchange and the divergence between this rate and the rate at which sterling drafts were sold gradually increased until in March it was as much as 3 d.'

On February 19th £2 000 000 was offered at a difference of about 3d over the market rate, the applications were for no less than £122 388 000. In March the difference between the Bank rate for Telegraphic Transfers and the official rate was about 1 d and applications fell off to £56 90 000. The difference fell to about one penny in April but by the middle of May it had increased to 4 d and applications were again received for more than £12 000 000. At the sale on 15th June for a third time while £1 000 000 was offered tenders were received for upwards of £122 000 000 the difference between the Government rate and market rate being more than 7d.

Having regard to the fall in the market rate for sterling, Government, as stated above, lowered the rates to 1s. $11\frac{1}{2}d.$ for Telegraphic Transfers, and 1s. $11\frac{1}{2}d.$ for Deferreds, on June 24th. They frankly abandoned the attempt to maintain exchange at 2s. (gold), considering it hopeless. According to the Currency Committee the rate for Immediate Telegraphic Transfers on London was to be based on the sterling equivalent of 11.33,016 grains of fine gold as measured by the prevailing dollar-sterling exchange. That equivalent was 2s. 5d. per rupee, while the new Government rate was 1s. $11\frac{1}{2}d.$

(b) The weekly offer of sterling drafts on London continued till the end of September, when the Government withdrew the offer, not without "reserving to themselves the right of resuming these sales should circumstances in their opinion at any time subsequently render resumption expedient".

Thus ended the heroic attempt of the Government to stabilize exchange in accordance with the recommendations of the Babington Smith Committee.

From January to September 1920 Reverse bills to an amount of £55,000,000 were sold, which figure constitutes a record in the annals of our finance. The bills were sold at rates which very often were "absurdly cheap compared with the market value" (The Times, London). "The favoured allotments of the bills", in the words of the Indian trade correspondent of the Manchester Guardian Commercial, "became a very grave scandal".

(c) The history of our exchange since September 28th, 1920, is told in a few words. Exchange fell rapidly in October (1920). The situation was tersely summarised by a Calcutta merchant who, when questioned by a correspondent of an English financial paper, said that there was no exchange. To support exchange Government raised the embargo on the export of wheat from October 1920 till March 1921. A total export of 400,000 tons was allowed. There was in 1919-20, as compared with 1918-19, an increase of 26 per cent. in the area under wheat, and of no less than 34 per cent. in the yield, which was estimated at 10,092,000 tons. The wheat exports, however, did not exercise any perceptible influence on exchange. On 28th December, 1920, the rate for Telegraphic Transfers was 1s. 5d. per rupee, and it continued to fall until on March 9, 1921, only 15d. could be purchased with a rupee. Then it rose a little, but throughout the remaining eight months, till the end of the year, it remained a little below 1s. 4d. sterling (about 13d. gold).

While the sale of Reserve bills in 1920 on an unprecedented scale did very little to stabilize exchange at 2s (gold), it stimulated very considerably imports into India. This is shown by the following table —

Value of trade in private merchandise according to four main classes.

In thousands of rupees,

Exports.

	1919-20	1920-21
Indian Merchandise—		
I.—Food, drink and tobacco	42,22,83	43,67,44
II.—Raw materials and produce and articles mainly unmanufactured	1,59,83,16	1,03,42,57
III.—Articles wholly or mainly manufactured	1,03,24,60	86,91,11
IV.—Miscellaneous and unclassified	3,70,92	4,29,22
Total	3,09,01,51	2,38,80,84
Foreign goods (re-exports)	17,77,80	18,04,35
Total private merchandise	3,26,79,31	2,56,34,69

Imports.

I.—Food, drink and tobacco	41,12,88	85,97,14
II.—Raw materials and produce and articles mainly unmanufactured	17,37,08	17,10,55
III.—Articles wholly or mainly manufactured	... 1,45,35,07	2,74,97,60
IV.—Miscellaneous and unclassified	... 4,12,21	7,54,97
Total	... 2,07,97,24	3,35,60,26

The principal imports of articles wholly or mainly manufactured were as follows —

	<i>In thousands of rupees.</i>	
	1919-20	1920-21
Yarns and textile fabrics—		
Cotton	59,07,93	1,02,12,00
Silk	..	5,92,43 5,59,31
Wool		
Haberdashery and millinery	96,85	3,01,89
Others	1,59,58	5,53,00
Metals—iron and steel and manufactures thereof .	16,2d,73	31,28,58
Machinery of all kinds, inc- luding belting for machi- nery		9,58,82 24,08,56
Cutlery, hardware, imple- ments (except machine tools) and instruments .	71,74	16,15,73
Metals, other than iron and steel and manufactures thereof ..	6,39,94	9,34,55
Railway plant and rolling stock .	4,58,73	14,13,05
Carriges and carts, includ- ing cycles and motor cars	4,53,63	18,08,08
Chemicals, drugs and medi- cines ..	3,73,81	5,16,47
Dyes and colours ..	3,23,48	5,72,42
Paper, pasteboard and sta- tionery ..	3,12,71	9,12 49
Glassware and earthenware	2,74,47	4,77,67

Apparel	..	1,96,61	4,32,12
Hides and skins, tanned or dressed, and leather		53,73	1,28,62
Furniture, cabinetware and manufactures of wood		45,94	95,65
Arms, ammunition, and military stores		37,11	63,96
Miscellaneous		11,54,39	16,12,29
		<hr/>	<hr/>
Total		1,45,35,07	2,74,97,60
		<hr/>	<hr/>

It will be seen that while in 1919-20 India's net exports were of the value of Rs. 118 crores, in 1920-21 the excess of imports over exports amounted to 79 crores. The fears of those who thought that the rise in exchange would unduly stimulate imports and discourage exports, it appears, were well-founded.

The entirely unexpected fall in exchange involved our importers in serious losses and many of them refused to meet their obligations. What a fall in exchange means to importers may be shown by an example. At 2s. 4d. goods of the value of £10,000 are worth Rs. 85,000. When the exchange falls to 1s. 5d., Rs. 1,41,000 must be paid to take delivery of the same goods,—a loss of Rs. 56,000. It is no wonder that many importers tried to back out of their contracts. Faced with bankruptcy, they cancelled the purchases they had made. But that does not suit the foreign seller. His views on the cancellation of orders were well expressed by a

correspondent of the Manchester Guardian Commercial. "When the buyer was purchasing in an advancing market and goods were leaving English ports at a certain value and reaching port of destination at greatly enhanced values, he (the importer) surely took full advantage when selling, thus building up a nice reserve to meet declining markets. At such times the English exporter did not play down on his buyer by refusing to ship because he could have got higher prices somewhere else, he stood by his contract, and now is the time for the overseas buyer to reciprocate by standing fully and honourably by his commitments. The African, the Eastern and European traders, who seem to be the chief offenders, ought to realise that the English exporter must strenuously resist the cancellations."

The action of our importers in refusing to meet their obligations cannot be defended, but it must be pointed out that in many cases such refusal was due to real inability to pay, and not, as has been alleged, to lack of commercial morality. Again, in the passage just quoted, not merely Eastern, but African and European traders are also mentioned. The suggestion that businessmen in India and other Eastern countries, Africa and Europe are all lacking in commercial morality cannot be taken seriously. And so far as our importers are concerned, it should be remembered that Government did accept the recommendations of the Babington Smith Committee, and it did attempt to stabilize exchange, as we have seen, first at 2s. gold, and

then at 2s. sterling. In these circumstances it was natural for people to think that exchange would not fall below 2s. sterling, and when exchange fell below that rate they thought Government was to blame for it. The following is the text of the Resolution passed by the Indian piece goods Merchants' Association of Bombay regarding payment for imported piece goods —

"In view of the Government officers' frequent assurances as to the rates of exchange, and the passing of the law in the Supreme Legislative Council fixing the rate at 2s. per rupee, and also that the rate of guineas has been fixed at Rs. 10 each from a certain date, and in view of the extraordinary, low rate thereof at present ruling, and the consequent enormous loss the importing merchants are put to, it is hereby resolved that the payment of piece goods that may have already arrived be postponed till the exchange rate reaches 2s. per rupee, but payment be made to those firms and banks who allow that rate."

It cannot be denied that the action taken by the Government in regard to exchange in 1920 misled the people. Government can certainly claim that it is not responsible for the fall in exchange. But it acted with undue haste — it proceeded to stabilize exchange at a time when everything else was unstable. The inevitable result of Government's currency policy was the reduction of exports, the great stimulation of imports and broken contracts.

Things are improving slowly and, as the monthly returns of our sea-borne trade show,

the balance of trade has again turned in our favour.* But the causes which produced an unfavourable balance of trade in 1920-21 are still at work, and we are not yet out of the wood. The economic condition of the more important European countries is still far from satisfactory. The foreign demand for our products has a great deal to do with our exchange, and so long as the buying power of European countries does not increase the rupee exchange will remain low. Europe is in a bad way, to put it very mildly. The economic collapse of Russia, though it does not affect us directly, is a fact of great importance to the countries of Central Europe, who are our important customers. A grave political and

* *India's Balance of Trade during 4 months, April to July 1920, 1921 and 1922.*

(*Lakhs of Rs*)

(Excluding Government stores).	1920	1921	1922
Exports of Indian Merchandise.	9,324	6,742	9,046
Re-exports of foreign Merchandise.	7,13	4,36	4,31
<hr/>	<hr/>	<hr/>	<hr/>
Total exports	100,37	71,78	94,77
Imports of Foreign Merchandise.	99,68	83,79	67,78
<hr/>	<hr/>	<hr/>	<hr/>
Balance of Trade in Merchandise	+69	-12,01	+26,99

economic crisis seems to be developing in Germany and the mark is falling rapidly (August 1922). The fall of the mark has a direct effect upon the rupee exchange. Before the war Germany was an important buyer of our raw produce and food stuffs, and since the conclusion of peace she has reappeared in our markets both as a buyer and a seller. But the heavy fall in the value of the mark makes it impossible for her to buy Indian produce—it must, to that extent, diminish our exports. Every reduction of exports tends to raise the price of foreign bills, or to depress the exchange value of the rupee.

The fall in the rupee has been accompanied by a fall in the price of silver, and there seems to be some connection between the two movements. The year 1920 will rank as one of the most eventful years in the history of silver and of the rupee. As we have seen, it saw the rise of the rupee to the highest level ever recorded during the last 75 years, and an equally sensational fall. The price of silver also varied between very wide limits in 1920, 89½d in the February and 42d. in December. The price of silver exercised an important influence, not only on the rupee but on the currencies of other Eastern countries. For example, the highest quotation for the Hongkong dollar in London in February 1920, was 6s 2d and the lowest in December, 2s. 11d., similarly for the Shanghai tael, the highest quotation in 1920 was 9s. 3d and the lowest 3s 10½d. The rise in the price of silver, it seems, re-established the connection between the exchange value and the

bullion value of our rupee which existed before 1893, and when the price of silver fell, the exchange value of the rupee fell with it. The fall in silver is attributed to the cessation of the Chinese demand, the absence of purchases by the Indian Government and the absence of buying by the European mints. It should also be remembered that during 1920 France and her partners in the Latin Monetary Union melted down and sold practically the whole of their silver currency. A certain section of the British press holds France responsible for breaking the Eastern exchanges. On December 22, 1921, the cash price of silver in London was 35 $\frac{1}{2}$ d. per standard ounce, the Hongkong dollar dollar stood at 2s. 7d. the Shanghai tael, at 3s. 7d. and the rupee at 1s. 8 $\frac{1}{2}$ d.

* * * *

Since the publication of the report of the Babington Smith Committee economic conditions in India and other countries have very much changed. While discussing the effect of the 2s. rate on Indian trade the Committee said :—

“ Indian trade is at present prosperous, and India is in a favourable position for maintaining this prosperity. The world shortage of raw materials and food stuffs is likely to ensure a continuing demand for Indian produce during the period necessary for complete adjustment, while the great rise in the level of prices in countries importing from India should generally enable the Indian producer to obtain a satisfactory rupee price for his commodities in spite of the high exchange.”

Foreign, prices, however, have fallen rapidly during the last two years. This is shown by the table of international prices given at the end of the chapter. As compared with January 1921, prices in May, 1922, were, substantially lower in all countries, with the exception of Germany; in India they remained practically stationary. The fall of prices in the United Kingdom, the United States, Denmark, Holland and France has been checked to some extent, but present prices are still very much lower than the prices in 1921 and, on the whole, the tendency of prices is in the downward direction. The rise of prices in Germany is of very little significance, for it is offset by the low value of the mark. The Babington Smith Committee thought that prices, perhaps, would "remain at a high level for a considerable time, and that any return to lower level will be gradual." But they recognised that in the event of a rapid fall in world prices, which might render it difficult for costs of production in India to adjust themselves to the lower level of prices, it "would be necessary to consider the problem afresh, and take the measures which might be required by the altered circumstances."

There has also occurred an entirely unexpected fall in the price of silver. The rupee has again become a token coin, as it was before the war, but the question which has to be considered is, whether in view of the fall in silver, the rupee and the sovereign can circulate concurrently at the rate of Rs. 10 to the sovereign. The currency

Committee recommended the opening of gold mints in India so that "gold currency may be available when required." One of their arguments in favour of fixing the exchange value of the rupee in terms of gold as distinguished from sterling was "If the relation of the rupee to sterling is fixed while sterling varies in relation to gold, it is evident that the relation of the rupee to the gold will vary. But if (as we think essential) the rupee and the sovereign are both to remain unlimited legal tender in India, and to be available for circulation, it is necessary that the relation of the rupee to the sovereign should be fixed, since two coins cannot remain in circulation as unlimited legal tender and at the same time stand in a variable relation to one another" (Section 57). The sovereign has been declared legal tender at the new rate for internal circulation. By the Gold Ordinance of 1920, the sovereign and the half sovereign ceased to be legal tender at the old rate on June 21st, 1920, though they were received by Government at the rate of Rs. 15 during a moratorium of 21 days up to July 21. It is curious that on the same day Government lowered the rate for Reserve Councils to 1s 11 $\frac{1}{3}$.d. for Telegraphic Transfers, that is, in spite of their inability to raise the external value of the rupee to one-tenth of a sovereign, they raised its internal value. People thinking that the market value of gold was going to fall heavily, rushed to Government treasuries in order to exchange their sovereigns for 15 rupees. What these people would be thinking now when the price of a sovereign in the bazaar is Rs. 16 can be easily imagined.

So long as the intrinsic value of a sovereign is higher than its legal value, the sovereign will not be used as currency. In fact, if the object of Government in changing the ratio of the rupee to the sovereign was to drive gold coins out of hoards, and most of them into Government treasuries, that object has been achieved.

Is there any possibility of rupees and sovereigns being used concurrently as legal tender at the new ratio?

The relation of the rupee to the sovereign must depend in some measure on the relation of the market price of silver to that of gold. It is absolutely impossible for a Government to give any value it pleases to a gold or silver coin. In other words, the law which has made the sovereign a legal tender at Rs. 10 will remain a dead letter unless the market value of gold in terms of silver falls enough to reduce the market value of a sovereign to about Rs. 10.

Is there any likelihood of such a fall in the near or remote future?

The answer is, there is none. The price of gold cannot fall unless the demand for it decreases, or the supply increases. The world demand for gold is constantly rising, but the output is receding. Gold production increased steadily from 1893, when its value was £32.4 millions to 1915, when it reached the high-water mark of £ 96.4 millions. Since then it has steadily declined, as is shown by the following figures.—

In millions sterling.

1915	96.4	1916	79.0
1916	93.5	1919	75.2
1917	86.3	1920	70.0

"Expert opinion," says Professor Gustav Cassel in his second Memorandum," regards it as probable that a rise in production will take place up to something like 73 millions, perhaps 80 millions, but hardly more. We have therefore to reckon with the fact that the world's production of gold has become, definitely, insufficient for the rate of economic progress which we used to regard as normal before the war."

As regards silver, there is no immediate prospect of any rise in its price. As recent experience has shown, the rise in price during the war was not due to causes of a permanent nature, and the sensational rise in February, 1920, was the result of a sudden and unforeseen increase in the Chinese demand. The silver experts whom the Babington Smith Committee consulted were indeed of opinion that in the immediate future silver supplies would show no substantial increase, but they expected the rise in the price of silver to stimulate silver mining, and considered it possible that eventually silver production should begin to show a marked advance.

We thus find that there are good reasons for thinking that the world's silver output will probably increase in future, and that the world's gold output will decrease. In these circumstances the price of gold with reference to silver must rise, and it is perfectly ridiculous to fix the legal value of the sovereign at 10 rupees. We may conclude that, both in view of the heavy fall in world prices and the fall in the price of silver, the 2s. rupee is impracticable.

FOREIGN EXCHANGES

London on	Method of quoting	Par.	July 14, 1922
Paris	frances to £	25 22½	54 30
Berlin	marks to £	20 43	2070
Brussels	frances to £	25 22½	57 20
Italy	lira to £	25 22½	89 25
Amsterdam	florins to £	12·107	11 44½
Greece	drachmae to £	25 22½	160
Switzerland	frances to £	25 22½	23 15
Spain	pesetas to £	25 22½	28 52
Lisben	d to escuds	53½	3½
Christiana	kroner to £	18 159	26 87
Stockholm	,	18 159	17 11
Copenhagen	"	18 159	20 67
Helsingfors	marks to £	25 22½	214
Vienna	krone to £	24 02	120 000
Warsaw	marks to £	20 43	25,000
Prague	krone to £	24 02	197
Bucharest	lei to £	25 22½	750
Budapest	krone to £	24 02	5 500
Sofia	leva to £	25 22½	685
Belgrade	dinars to £	25 22½	370
Constantinople	piastres to £	111	735
Alexandria	"	97½	97½
New York	dollars to £	4 86	4 44½
Montreal	"	4 86	4 49
Calcutta	d to rupee	24*	15½
Bombay	"	24*	15½
Madras	,	24*	15½
Hong Kong	d to dollar	23 81†	30½
Shanghai	d to tael	32 5†	42½
Yokohama	d to yen	24 58	25½
Singapore	d to dollar	28	28

* Fixed at Rs. 10 to the sovereign September 8, 1920

† Average cable rate in 1913

	United Kingdom	United States Broad streets	Canada	Japan	France
1913	100	100 0	100 0	100 0	100 0
1920	295	197 2	246 2	257 9	509 3
1921	182	122 3	181 6	200 5	344 9
1921	232 0	134 3	207 6	201 1	406 5
January	215 3	128 8	199 3	195 1	377 4
February	208 5	123 5	194 2	191 0	359 9
March	199 8	117 5	187 2	189 9	347 0
April	190 8	115 3	187 5	190 9	329 4
May	183 3	116 5	179 1	192 1	324 9
June	186 1	120 0	176 1	196 5	330 1
July	181 5	120 3	174 5	199 3	331 3
August	175 8	121 5	171 7	206 9	344 0
September	162 8	123 2	169 2	219 2	331 3
October	160 8	122 8	167 7	214 3	331 8
November	157 2	123 5	170 3	209 5	325 7
December					
1922	155 9	124 0	168 0	206 1	313 8
January	155 5	126 0	169 4	203 9	306 4
February	156 8	125 2	166 5	200 8	307 5 ^a
March	158 6	127 1	166 1	197 7	313 7
April	159 4	129 2	167 0	194 4	316 8
May	159 5		165 5		325 0
June					

^a Provin
^b Average for 12 months

^c Year-end

^d Average for six months

^e July 1, 1912-

^f 1914-

Italy	Switzerland	Germany	Sweden	Norway	Denmark	Holland	India Labour Gazette
100.0			100	100	100	100	
624.3	1466	347	377	341	281		
577.5	19.3	196	211	298	336	181	
642.4	230.2	1484	267	344	290	213	191 ^f
613.3	219.1	1408	250	319	280	197	191
603.6	208.3	1408	237	312	270	188	190
583.9	186.3	1430	229	297	257	176	198
546.9	184.7	1387	2.8	294	254	182	199
508.9	178.6	1463	218	294	253	183	197
519.9	176.9	1733	211	300	254	176	199
541.8	180.6	1777	198	297	224	180	203
580.0	183.7	199	182	287	202	180	207
599.1	182.1	2698	175	286	186	169	195
594.8	177.5	3283	174	276	188	165	193
593.5	175.6	3467	172	269	178	165	190
577.2	170.7		170	260	177	160	190
562.5	170.6		166	253	182	162	186
533.3	167.8		164	240	178	161	192
526.8	160.6		165	236	177	161	188
	160.2	6609	164	231	179	165	189
537.5	161.3	7692		230	180		190

annual

ending June 1914

Index Number

ending June 1914

June 30, 1914

100

INDIAN EXCHANGE.

*Rate for Telegraphic Transfers at Calcutta
in Pence per rupee.*

1920.

	January.	February.	March.	April.	May.	June.	July.	August.
	s. d.	s. d.						
2	2-4 $\frac{1}{4}$	6						
9	2-4 $\frac{1}{8}$	13						
16	2-4 $\frac{7}{8}$	20						
23	2-4 $\frac{7}{8}$	27						
30	2-4							
5	2-7 $\frac{1}{2}$	9						
12	2-5 $\frac{1}{2}$	16						
19	2-4 $\frac{1}{4}$	23						
26	2-4 $\frac{1}{4}$	30						
31	2-4 $\frac{1}{8}$							
7	2-1 $\frac{3}{4}$	4						
14	2-1 $\frac{1}{4}$	11						
21	2-1 $\frac{1}{8}$	18						
28	2-1 $\frac{1}{4}$	25						
2	1-9 $\frac{1}{2}$	6						
9	1-10 $\frac{1}{2}$	13						
16	1-10 $\frac{1}{8}$	20						
23	1-10 $\frac{1}{8}$	27						
30	1-11 $\frac{1}{8}$							

September		October	
	<i>s d</i>		<i>s d</i>
8	1—10 $\frac{1}{16}$	1	1—9 $\frac{17}{32}$
10	1—10 $\frac{1}{8}$	8	1—8
17	1—10 $\frac{3}{8}$	15	1—7 $\frac{13}{16}$
24	1—10 $\frac{1}{4}$	22	1—7 $\frac{4}{5}$
		29	1—7 $\frac{9}{16}$
November		December	
5	1—8 $\frac{3}{4}$	3	1—6
12	1—8 $\frac{3}{4}$	10	1—4 $\frac{3}{4}$
19	1—7 $\frac{1}{2}$	17	1—5 $\frac{5}{8}$
26	1—6 $\frac{1}{4}$	23	1—5 $\frac{1}{2}$
		31	1—5 $\frac{1}{4}$
1921			
January		February	
	<i>s d</i>		<i>s d</i>
6	1—5 $\frac{1}{4}$	2	1—4 $\frac{3}{8}$
12	1—5 $\frac{1}{4}$	9	1—4 $\frac{9}{16}$
19	1—5 $\frac{1}{4}$	16	1—4 $\frac{1}{8}$
26	1—5 $\frac{1}{4}$	23	1—3 $\frac{1}{4}$
March		April	
2	1—3 $\frac{3}{8}$	6	1—3 $\frac{9}{16}$
9	1—3	14	1—3 $\frac{1}{16}$
16	1—3 $\frac{1}{4}$	20	1—3 $\frac{1}{8}$
22	1—3 $\frac{1}{8}$	27	1—3 $\frac{1}{8}$
30	1—3 $\frac{1}{8}$		
May		June	
4	1—3 $\frac{5}{8}$	1	1—3 $\frac{3}{16}$
11	1—3 $\frac{9}{16}$	7	1—3 $\frac{1}{8}$
18	1—3 $\frac{5}{16}$	14	1—3 $\frac{17}{32}$
25	1—3 $\frac{1}{16}$	22	1—3 $\frac{5}{32}$
		29	1—3 $\frac{1}{32}$

July

August.

		s.	d.		s.	d.
6	...	1	3 $\frac{5}{6}$	3	...	1 3 $\frac{5}{6}$
13		1	3 $\frac{5}{6}$	10	...	1 3 $\frac{5}{6}$
20	..	1	3 $\frac{5}{6}$	16	...	1 4
27	.	1	3 $\frac{5}{6}$	23	...	1 4 $\frac{1}{6}$
				31	...	1 4 $\frac{1}{6}$

September.

October.

7		1	4 $\frac{1}{6}$	5	...	1 5 $\frac{1}{6}$
12	.	1	4 $\frac{1}{6}$	12	...	1 5 $\frac{1}{6}$
21		1	5 $\frac{1}{6}$	19	...	1 4 $\frac{1}{6}$
28	.	1	5 $\frac{1}{6}$	26	...	1 4 $\frac{1}{6}$

November.

December.

2		1	4 $\frac{1}{6}$	7	...	1 3 $\frac{1}{6}$
8	.	1	4 $\frac{1}{6}$	14	..	1 3 $\frac{1}{6}$
16		1	4 $\frac{1}{6}$	21	..	1 3 $\frac{1}{6}$
23		1	3 $\frac{1}{6}$	30	...	1 3 $\frac{1}{6}$
30	.	1	3 $\frac{1}{6}$			

1922.

January.

February.

4	..	1	3 $\frac{1}{6}$	1	...	1 3 $\frac{1}{6}$
11		1	3 $\frac{1}{6}$	8	...	1 3 $\frac{1}{6}$
18	...	1	3 $\frac{1}{6}$	15	...	1 3 $\frac{1}{6}$
25		1	3 $\frac{1}{6}$	22	...	1 3 $\frac{1}{6}$

March.

April.

8		1	3 $\frac{1}{6}$	5	...	1 3 $\frac{1}{6}$
15		1	3 $\frac{1}{6}$	11	...	1 3 $\frac{1}{6}$
22		1	3 $\frac{1}{6}$	19		1 3 $\frac{1}{6}$
29		1	3 $\frac{1}{6}$	26		1 3 $\frac{1}{6}$

May.

8	1	3 ⁷ ₁₂	7	1	3 ⁷ ₁₂
10	1	3 ² ₁₂	14	1	3 ¹ ₁₂
17	1	3 ¹ ₁₂	21	1	3 ¹ ₁₂
31	1	3 ² ₁₂	28	1	3 ² ₁₂

July.

5	1	3 ² ₁₂	2	1	3 ⁴ ₁₂
12	1	3 ⁵ ₁₂	9	1	3 ⁵ ₁₂
19	1	3 ¹ ₁₂	16	1	3 ¹ ₁₂
26	1	3 ¹ ₁₂	23	1	3 ¹ ₁₂

September.

5	1	3 ¹ ₁₂
12	1	3 ¹ ₁₂

June.

8	1	3 ⁷ ₁₂
10	1	3 ¹ ₁₂
17	1	3 ¹ ₁₂
31	1	3 ⁵ ₁₂

August.

5	1	3 ⁴ ₁₂
12	1	3 ⁵ ₁₂
19	1	3 ¹ ₁₂
26	1	3 ¹ ₁₂

A Gold Currency for India.

The position of gold in the Indian currency up to the commencement of the fall in the gold value of silver in 1873 has been described in Chapter XI. The Government of India closed the controversy about the introduction of a gold currency in India by their Resolution of 7th May 1874, which stated that the Government were "not at present prepared to take any step for the recognition of gold as a legal standard of value in India." The continued fall in the rate of exchange led the Calcutta Trades Association and the Bengal Chamber of Commerce in 1876 to ask the Government to suspend the coinage of silver by the Indian mints. The Government declined to interfere with the standard of value. Two years later, however, the Government changed their opinion and expressed their willingness to give "a certain limited scope" for the introduction and use of gold coins in India, "so far as it was found convenient or profitable." Their proposals were referred to a departmental Committee in England which made short work of them. The Committee briefly reported that they were "unanimously of opinion that they

cannot recommend them for the sanction of Her Majesty's Government."

In 1892 we find the Government of India again advocating a gold standard for India. The Herschell Committee, while not advising the Secretary of State to over-rule the proposals of the Government of India for the closing of the mints and the adoption of a gold standard, suggested certain modifications of these proposals which were adopted by the Government. The question of a gold standard was favourably considered by the Fowler Committee but no sooner had their report been published than the British treasury began to oppose their scheme tooth and nail. For two years, from 1899 to 1901, says Mr. Keynes "they made a succession of technical difficulties in a spirit of scarcely veiled hostility to the whole proposal."* In May 1901, however, some agreement was arrived at between the authorities in England and in India as regards the establishment of a gold mint at Bombay. "At this point in the negotiations" says Mr. Keynes "the natural instincts of the Treasury Officials became uncontrollable and respect for independence of the India office had to be abandoned. Their first line of defence in the form of technical difficulties having been overcome, they fell back upon open argument as to the wisdom from the Indian point of view of the whole project."*

They urged that the gold standard had been firmly established in India, that sovereigns were readily attracted to India when required, that the

* Indian Currency and Finance Page 54

estimates of the Government of India of gold available for coinage were less than was anticipated, and that the staff of the proposed Indian mint would have to be maintained in idleness for a large part of the year at considerable cost to the Indian exchequer "It is, of course, for Lord George Hamilton, (the Secretary of State) to decide" said the Lords of the Treasury in conclusion, "whether in spite of these objections the scheme is to be proceeded with." The India Office informed the Treasury that His Lordship was not inclined to abandon the scheme. The Treasury's reply was "My Lords cannot believe that the position of gold standard in India will be strengthened or public confidence in the intentions of the Government confirmed, by providing machinery for obtaining gold coins *which is neither demanded nor required by the mercantile community*, while on the other hand, the failure or only partial success of a gold mint would, undoubtedly, be pointed to by the opponents of the gold standard policy (although without justification) as evidence of the breakdown of that policy."

Thanks to the opposition of the British Treasury, no gold mint was established in India. But in accordance with the recommendations of the Fowler Committee the sovereign was declared legal tender in 1899. We shall now consider, briefly, how far this measure encouraged the use of gold as currency.

An attempt was made by Government in 1900 to introduce gold into circulation. Payments

of gold from the Currency Reserve commenced on 12th January, 1900 at the currency offices in Calcutta, Madras and Bombay, and towards the end of that month, at the remaining currency offices. "The instructions issued were to tender gold to all presenters of notes, but to give rupees if they were preferred." Later on sovereigns were sent to the larger District Treasuries with instructions that they might pay sovereigns to any one who might desire to receive them in exchange for rupees or in payments due by the Government. In March, 1900, the Post Offices in the Presidency towns and Rangoon were instructed to give gold in payment of money orders, and the three Presidency Banks were requested to issue sovereigns in making payments on Government account. These arrangements continued in force throughout 1900-01, and it was estimated that about £6,750,000 was put into the hands of the people. Of this amount part was exported, and more than half returned to Government, so that not more than £3,000,000 remained in the possession of the public. Because a considerable amount of gold had returned to Government it was thought that the people did not want gold as currency and preferred rupees. The Comptroller of Currency in his *Report on the Operations of the Currency Department for 1899-1900*, said. "The issues of sovereigns from currency offices under these orders were not inconsiderable, but the receipts continued large and considerably in excess of the issue. Gold has apparently not yet begun to circulate in the country as money. But probably, gold had begun

to circulate as money. In the case of an agricultural community payment of Government dues is the chief item of expenditure. The return of gold to Government was not an indication of the desire of the agriculturists to get rid of the gold as fast as possible; it rather showed that the people were using gold as money should be, and is meant to be used. If the gold had remained in the possession of the people it would have been said that it had been hoarded.

The net absorption of sovereigns in 1901-02 amounted to £ 9 millions. The increase in the popularity of the sovereign is shown by the increase in the amount of the absorption every year. The amount absorbed was £ 1 million in 1902-03, £ 2 millions in 1903-04, £ 2.2 millions in 1904-05, £ 2.7 millions in 1905-06 and £ 3.9 millions in 1906-07. "The absorption in the year under report" said the Comptroller of Currency in his report for 1906-07, "has so far been the highest on record, the United Provinces and the Punjab showing the largest demand." But the absorption in 1907-08 (£ 6.2 millions) was 59 per cent. greater than that in the preceding year. "The absorption in the year under report," said the Comptroller in his report for 1907-08, "has been the highest on record, the most notable increases having occurred in the United Provinces, the Punjab, Burma, Madras, and Calcutta." The absorption in the year 1908-09 was only £ 2.4 millions, but "it would have been higher than ever had gold been available throughout the year." The receipts at the currency offices from imports during the year amounted to £ 7,139,000 but the

gold was received only in the closing months of the year. There were no receipts from April to October 1909 (both inclusive). In 1910-11 the total absorption amounted to £ 7,187,000 as compared with £ 6,220,000 for 1907-08. As regards the popularity of the sovereign, the Comptroller of Currency in his report for 1910-11 acknowledged that "the apprehension that the sovereign would not be popular was not well founded . . ." But he pointed out that "the acceptance of the sovereign is not yet general," possibly due to the fact that they were not everywhere offered. The Comptroller also doubted whether the sovereign had established itself as currency, though he recognised that "so far as it pays for produce and so far, again, as it comes back in payment of revenue, it acts as currency" His theory was that the acceptance by the cultivator of gold in payment of his crops was, probably, in the nature of barter. In 1911-12, however, the absorption of gold in Northern India and Bombay necessitated special enquiries as to the exact use made of the gold. The result of the enquiries was published in the Currency Report for 1911-12. The enquiries showed that a very considerable proportion of the gold absorbed in the Punjab was actually in circulation as currency, that, in some cases, better rates and terms could be obtained when gold was tendered in payment of produce than when silver was offered, gold thus being practically at a premium. "The people preferred gold because it was less troublesome than silver money." The enquiries made

in the Gujranwala district showed that all the grain agents paid the Zemindars chiefly in gold and that the Zemindars paid their revenues in gold. "The Zemindar prefers to have his price for the grain in gold as he can easily carry it and easily exchange it, and if necessary, put it away. He shies at currency notes of any value as they cannot be easily exchanged, and to receive payment in silver means cost of carriage and a greater risk of being robbed." Gold was, in short, preferred because it is money of higher monetary utility than silver. The enquiries made in Bombay showed that gold was not being hoarded or melted to the same extent as before, and that the gold circulation was steadily increasing. The enquiries made in the United Provinces, Madras and Burma showed similar results.

The total absorption of sovereigns in 1912-13 (£10,245,000) was more than a third in excess of that in 1911-12 (£7,600,000). Special enquiries were again made as to the exact use to which the sovereigns were put, which confirmed the results of the enquiries made in the preceding year.

In 1913-14 the absorption of sovereigns amounted to £12,074,000. Special enquiries made in this year showed that in "certain parts of India, at any rate, sovereigns are used to an increasing extent in real currency transactions". The sovereign had "certainly displaced silver to some extent in Bombay and the United Provinces, and probably in a lesser degree in Madras and Burma also". The general conclusion of the Comptroller of Currency was that "in large portions of

India sovereign is now entering largely into ordinary transactions in cases in which they are of sufficient size to make its use possible."

From the evidence quoted above it would appear that before the war there was a genuine demand for gold for currency purposes in India. The gold exchange system ignores this demand. In fact, the gold exchange system is based on the principle of discouraging the people from using gold as currency, while making it freely available for payments of foreign indebtedness. The ostensible object of Mr. Lindsay's scheme was to confer on India the advantages of a stable exchange. But the system can be so worked as to prevent India from getting gold. And when one reads Mr. Lindsay's pamphlet entitled "Ricardo's Exchange Remedy", one begins to doubt whether he regarded the gold exchange system as the ideal monetary system for India, or as one advantageous to the London money market. On page 12 of the pamphlet the attention of the reader is attracted to the following sentence printed in bold type —

"In this way a gold standard might be established in India without risk and with considerable profit to the State and the Bank of England and with advantage to the London money market. There would be no increase in the demand for gold and little decrease, if any, in the demand for silver".

The *Pioneer* newspaper of Allahabad, dated 6th January, 1898, while describing in great detail Mr. Lindsay's scheme, thus commen-

ted on the proposed institution of a Gold Conversion Fund or the Gold Standard Reserve:—

“The object of the scheme is to prevent the use of gold as currency in India, and to confine its use in connection with the Indian currency to the settlement of the balances of India's foreign indebtedness, as it is pure waste of time and money to bring gold out to India merely for the purpose of having it sent back”.

It is thought that if India was encouraged to use gold as currency, a far larger proportion of the world's production will go to India every year, with the result that there would not be enough gold for other countries. It is this fear of the drain of gold from England to India which governs the policy of the sale of Council bills in excess of the Home Charges. Up to the time of the closing of the mints to the coinage of silver, Council bills were sold with the sole object of providing the funds needed by the Secretary of State for meeting the Home Charges. With the development of the gold exchange system, however, the Council bill system began to assume new importance, and it finally became a means of diverting payments of India's foreign balances from gold to silver. Mr. O. T. Barrow, who gave evidence before the Chamberlain Commission as the representative of the Government of India frankly told the Commission that it was “desirable to check the excessive importation of gold into India”. If gold was allowed to come to India, it would be used for currency or for hoarding. In either case, said Mr. Barrow, “if it went into the country and stayed there, it

would mean a further drain of gold from England. It must mean a further drain, whichever it is." The Chairman asked Mr. Barrow whether, supposing it did mean a further drain of gold from England, he would say that that must be the governing consideration for India, to which Mr. Barrow replied "Yes, I think so. My own feeling is that anything which lessens the world supply is bad for India, that is to say, if you encourage the gold to go into hoards."

Another witness, Mr. W. B. Hunter, who was for 25 years in the service of the Bank of Madras, thus explained the object of the sale of Council bills —

Q.—6314.—"Originally the sole purpose was for the transfer of funds on Government account, but since the closing of the mints I think that that is of secondary importance now, especially with regard to the conditions of the London money market. Otherwise than by very large shipments of gold at a time which probably would be inconvenient, there is no other means of paying for the balance of trade".

To Sir James Begbie's questions regarding the Council bill system Mr. Hunter replied as follows —

Q.—You also favour the Council bill system with the object of reducing the movement of gold coin from Europe to India?—This is so.

Q.—Your object is to prevent gold coin coming into India?—To prevent unnecessary gold coin being withdrawn from London at times of pressure, as I hold that a tight money market reacts on the Indian export trade.

Q.—Your object is to prevent disturbance of the London money market?—That is my chief object.

Q.—You propose to achieve that by sale of bills in London to the extent that would be sufficient for that object?—Yes.

It is not surprising that a system of currency, whose avowed object is to prevent gold from being used for the purposes of circulation in India, is regarded with distrust by the people. As a matter of fact, one of the reasons for raising the exchange to 2s. was that it would enable the Secretary of State to buy more silver for coinage, thus reducing India's demand for gold and making more gold available for the conversion of notes in other countries. One of the arguments in favour of a 2s. (gold) rupee submitted by Mr. F. H. Lucas, Financial Secretary, India Office, to the Babington Smith Committee was stated as follows—

"The fear is thought to exist that under free conditions India's absorption of gold would diminish the chances open to other countries of obtaining gold to restore the value of their insufficiently backed paper issues. The amount of gold going to India would depend on the extent to which silver purchases by the Indian Government displace private imports of gold as a means of balancing Indian trade; a higher price limit would secure a larger supply of silver, thus diminishing the gold taken by India. It follows that the fear of undue gold absorption would be, *pro tanto*, met by the proposal to fix a high rate of exchange, which is recommended.....below

as a protection of the masses in India from the effects of high world prices arising out of the war. The volume of the currency would still be automatic, but the limits of the Government's control over the proportions of its constituent elements as between silver and gold would be extended, *pro tanto*, by fixing a higher rather than a lower limit to the Government's buying price of silver."

A system of money which rests on suspicion and which excites distrust is a *bad* system. Further, it is a sound currency maxim which says that a Government, in currency matters, should do as little as possible. But by regulating the flow of gold to India the Secretary of State effectively determines the demand for rupees and the coinage of rupees in India. It is a very much "managed" system

* * * *

Among the objections to a gold currency for India we may notice two (1) that Indians have not given up the practice of hoarding, and (2) that a policy of popularisation of gold would weaken the reserves now maintained for the support of exchange.

It cannot be denied that hoarding still goes on in India, though to a much smaller extent than is commonly supposed. Banking in India is in its infancy, and it is natural for the illiterate peasant in the village, unless he happens to be a money lender, to hoard his surplus cash. But it is wrong to think that he cannot use gold as money. "Hoarding," to quote the words of the Fowler Committee, "did not render a gold circulation an impossibility in the past," and

there is no reason to think that it will have any such result in the future.

Again, such hoarding as still goes on in India cannot be prevented by giving the people token rupees to hoard instead of a full value gold coin. In the course of his evidence before the Fowler Committee Mr Lindsay said — “I think that habit of hoarding is an economic evil and an enlightened Government should do all in their power to discourage it” Everybody thinks so, but if a country is very inadequately supplied with banking facilities, if the opportunities for the profitable investment of money are small, and lastly if the people are illiterate and ignorant, they cannot be made to give up hoarding by the substitution of token coins for full value coins in the currency. The quantity of the precious metals now hoarded is much smaller than it used to be, and it may be hoped, that with the spread of education, the increase in banking facilities and the development of Indian industries, it will grow smaller still.

About the effect of establishing a gold circulation in India on exchange the Chamberlain Commission wrote — ‘ Advocates of a gold currency are met, therefore, by the difficulty that the circulation of gold on a moderate scale only is of no substantial use, while on the other hand, the circulation of gold on a large scale, at any time in the near future, must necessarily be at the expense of the existing Reserves and, so far from increasing the gold in the country, must have the effect of making what gold there is less

available for the support of exchange." (Section 63).

Now it cannot be denied that a stable exchange is a desirable thing, and that a currency system which ensures a stable exchange is superior to one under which exchange must be unstable. But two things may be pointed out (1) that it is possible to exaggerate the evils of a fluctuating exchange, and (2) that our recent experience has shaken our faith in the doctrine that the gold exchange system guarantees a stable exchange.

1. Instability of exchange has a disturbing effect on a country's foreign trade, but it has never the effect of bringing the export or the import trade of a country to a standstill. In fact, there was a remarkable expansion of our foreign trade between 1871-72 and 1894-95 in spite of a falling rupee. The total value of the merchandise exported from India increased from 63,18 lakhs of rupees in 1871-72 to 10,650 lakhs in 1894-95, or 69 per cent., while the imports of merchandise increased from 30,81 lakhs to 73,52 lakhs, or 139 per cent. (The slower expansion of the export trade as compared with the import trade was due to the fall in gold prices which occurred in this period).

(2). The chief advantage claimed for the gold exchange system is that it enables silver using countries to secure a stable par of exchange with gold using countries. But, as we have seen, stability of exchange depends upon steadiness in the price of silver, and that any considerable rise in the price of silver above the bullion par of the token coin, whether this rise occurs in a time of war

or peace, would destroy the whole system. It was objected to Mr. Lindsay's scheme that the rise in the gold price of silver above the rate adopted in India would force Government to issue rupees at a loss. Mr. Lindsay considered the objection, along with many others, in his pamphlet referred to above. "The objection is met," he says, by the stipulation in the scheme that the rate adopted in India for the issue of rupees shall be one profitable to Government. If the gold price of silver should rise above the Indian rate, it will be necessary to fix upon a fresh sterling price for the issue of rupees. This change would cause an unfortunate fluctuation in exchange, but this fluctuation would be greater under the present system, and one fluctuation is less injurious than many."*

And the gold price of silver during the war having risen above the Indian rate, a fresh sterling price for the issue of rupees was fixed, 2s. (gold). But, as we have seen, the 2s. rate is not effective. It is easy to enact that the gold price of the rupee shall be 2s., but if nature and economic laws 'non-co-operate,' the Government rate could not be enforced. Mr. Lindsay thought that when the price of silver rose above the bnilion par of the rupee it would be enough if the gold price of the rupee was raised. How very simple, you say. Under a silver standard there are many fluctuations in the rate of exchange. Under a gold exchange system there is just one fluctuation—that is, the change of rate required to restore to the silver

* "Ricardo's Exchange Remedy" by A. M. L (1892) p 20.

coins their character of token money. But Mr. Lindsay forgot that the price of silver could fall again, necessitating a return to the old rate. The law must be changed again and the old rate re-established. This is a second fluctuation. But suppose, owing to a shortage in the supply, or increased demand on the part of other countries of the world, the price of silver begins to rise again. Action must be taken to save the tokens from the melting pot, and there will be a third fluctuation, and so on. There is, in fact, no guarantee that the gold rate adopted can be maintained for any length of time. It may, further, be pointed out that official changes in the rate are much more objectionable and harmful than fluctuations due to natural and economic causes. The "many" fluctuations hamper trade and injure debtors or creditors, but if Government does not intervene and fix a rate or attempt to fix one, allowance will be made for them, and if they cause loss to particular individuals, the loss will be regarded as the result of natural causes for which no one is responsible. The "one" fluctuation due to the action of Government is objectionable because in such a case Government is directly responsible for the violation of the sanctity of contracts.

It is thus seen, in the first place, that the idea that a gold exchange system ensures a stable exchange must be given up; and secondly, that official changes in the rate of exchange are in the highest degree undesirable.

We should also remember that, ultimately, the success of a country in maintaining a stable

exchange must depend upon the nature of the foreign demand for its principal exports. In this respect India's position is strong. There is a large demand for our products in foreign countries and the balance of trade is, normally, in our favour. The unfavourable balance of trade in 1920-21 is an exception. A country whose economic constitution is sound and whose exports are in universal demand, has not much to fear from a fall in exchange. In the case of such a country the fall in exchange must be temporary. The balance of trade would automatically right itself and the exchange would rise. The real security against a fall in exchange thus lies in our favourable balance of trade and our ability to meet an unfavourable balance by increasing our exports of such commodities the foreign markets for which are large and elastic. India, as is shown by the following table, also imports considerable quantities of precious metals, and she could pay large sums abroad by suspending these imports. —

In lakhs of rupees

Year.	Imports of treasure.	Exports of treasure	Net im- ports of treasure.
Average for 1899-00 to 1903-04 .	26,00	11,64	1,436
Average for 1904-05 to 1908-09 ...	36,15	990	26,28
1909-10	37,52	990	26,28
1910-11	39,73	680	31,18
1911-12 .	53,47	10,37	43,10
1912-13	61,83	10,63	51,20
1913-14	48,43	708	36,55
Average	47,19	831	38,88
1914-15	21,81	529	16,52
1915-16	11,94	823	371
1916-17	38,45	642	82,03
1917-18	51,77	755	44,22
1918-19 .	71,37	901	62,36
Average	39,07	780	31,77
1919-20	78,24	13,68	64,56
1920-21	34,59	26,17	842

Among the articles which find a ready market in foreign countries, and the foreign demand for which may be considered to be elastic, cotton-hides, rice and tea may be mentioned. The total,

value of these exports in the pre-war year 1913-14 and in 1919-20 and 1920-21 is given below.—

EXPORTS.

In lakhs of rupees

Articles	1913-14	1919-20	1919-20
Cotton, raw	41.04	58.66	41.62
Cotton goods	13.68	27.41	18.27
Hides, raw and tanned and dressed	9.68	15.21	2.91
Rice	26.39	9.91	17.89
Tea	15.00	20.56	12.14
Total	1,00.81	1,31.74	92.89

The foreign demand for jute is not absolutely inelastic as some fibres compete with it. The total exports of jute and jute manufactures in 1913-14, 1919-20 and 1920-21 were 50,09, 74,71 and 69,33 lakhs respectively.

It would therefore seem that, by restricting her imports so far as that may be possible, and increasing such of her exports as have a worldwide market, India could without much difficulty pay off her creditors in a time of difficulty.

CONVERTIBILITY.

It has been argued in chapter V that the most important cause of the rise of prices between 1905 and 1912 was the redundancy of the rupee currency. The relation of the gold exchange

system to prices has not hitherto received the attention which it deserves. It is very often assumed that since the gold exchange system ensures a stable exchange (the price of silver remaining steady), it satisfies all the requirements of an ideal monetary system. "The establishment of the gold value of the rupee, on a stable basis", wrote the Chamberlain Commission, "has been and is of the first importance to India". But stability of exchange is not of the first importance even for trade. The thing which is really of the first importance to India is whether her currency system works automatically so that the currency does not tend to become inflated, and whether the people can get the form of money which they desire both for internal use and for export.

Under the existing system notes are convertible into rupees, but rupees are not convertible into gold except for a very limited purpose—payments of foreign indebtedness. The whole mass of Indian currency consisting of rupees and notes may be regarded as inconvertible. In this sense, the rupee is little better than the paper note, the rupee is a note printed on silver. The fact that the encumbrage on the rupee is, say, 30 per cent. and not 100 per cent. as in the case of the paper rupee, is a point of very slight importance. The internal currency under a gold exchange system might well consist exclusively of notes, which may be convertible at a fixed rate into gold for foreign payments. But the great danger of an inconvertible currency, or a currency which is convertible only to a limited

extent, is that it tends to be over-issued. Can it be doubted that if our circulation consisted exclusively of notes which were convertible into gold only for making foreign payments, but not for internal use, the currency would become redundant, even if additions to the circulation were made as under the existing system *i.e.*, through the conversion of gold or Council bills imported into notes? Now the character of our circulation is not fundamentally altered by the fact that part of the circulation consists of inconvertible notes printed on silver. It has been explained in a preceding chapter that the forces tending to reduce the volume of the circulation in a gold exchange system do not, and cannot, work smoothly. The only remedy against inflation lies in the maintenance of convertibility of the internal currency for all purposes. It is for this reason that in France and the United States which possessed a large volume of full legal tender token currency before the war, provision had been made for the redemption of the tokens in gold. The system of redemption consisted of two parts payment of silver by the public to Government on terms of equality with gold, and the payment of gold by Government to the public. Laughlin thus describes the working of the system of redemption in the United States —

"At the customs, silver dollars are receivable equally with gold, and so long as payments are not made in silver, gold and silver are given a test of equality in payments to the Government. Here, then, is an outlet for all superfluous silver

dollars; if not needed, they can be sent back to the Treasury through the customs. This is one of the two essential operations in a system of redemption,—the presentation to the issuer of the undesired money. The other, and completing, operation is that of obtaining gold by the public in place of the silver sent in. Therefore, if the Treasury will pay out gold, and not silver, on any warrants presented to it, the system, although indirect, is complete throughout. So long as the Government receives silver on equal terms with gold, and pays out gold on demand, we have an effective system of redemption. Suppose the country has too much silver in circulation by \$50,000,000. By working this off, in payment of customs back to the Treasury, the public have rid themselves of that quantity of silver. Then if those who have demands against the Treasury request gold and obtain it to the amount of \$50,000,000, the public will have obtained in its circulation, if needed, that new quantity of gold. The outcome, in effect, is equal to an exchange of \$50,000,000 of silver for \$50,000,000 of gold. What other result, except that of obvious convenience and simplicity, would be produced by a direct and authorized system of redemption? Under a system of direct redemption a surplus of \$50,000,000 of silver presented for gold would produce the same results as those above; the Treasury, instead of the public, would have the \$50,000,000 of silver; and the public, instead of the Treasury, would have the \$50,000,000 of gold. In the end the outcome of both indirect and direct redemption is the same".*

* *The Principles of Money* by J. L. Laughlin, p. 519.

Laughlin, however, does not regard the system of indirect redemption as perfect. So long as there is no legal obligation on the part of Government to convert the tokens into gold, some uncertainty as to the parity of the tokens would remain, the system also might break down in an emergency —

"An open declaration of the redemption of silver dollars in gold is the only means of escaping emergencies which might wreck the indirect system now prevailing. A legal requirement, moreover, would necessitate adequate provisions for obtaining gold in emergencies (by sale of bonds or otherwise) which would remove for ever all uncertainty as to the parity of the token silver pieces".*

The parity of the five franc piece with gold was maintained in France by a similar system of redemption. To quote Laughlin again —

"The Bank of France, however, in the process of indirect redemption, plays much the same part in regard to the five-franc coins as does the Treasury of the United States in respect to silver dollars. The Bank furnishes a place of refuge for five-franc pieces, if redundant. All the state treasuries, as well as the Bank of France, are obliged to accept five franc silver pieces in payments to them at their nominal value equal to gold. Here again we have the first part of a practical system of redemption, — the means of working off superfluous coins. The complementary part is connected with the practice of the Bank of France in paying out gold when requested.

So long as the Bank does not force the payment of silver on the public, the process of indirect redemption by which the token silver coins are kept at par with gold remains effective. It is true that in France, as in the United States, there is no legal direct system of redemption, but in both cases a practice exists which is equally serviceable. Although in the past gold has been skilfully accumulated by the Bank of France, practically no attempt has been made to force silver on the public in payments by the Bank. While for ordinary sums there has been no difficulty in getting gold, it is true that a slight premium has been charged if large sums of gold were demanded for exportation. This charge, however, has never I believe, exceeded one-tenth of one percent, and has often been much less. That is, the policy of the Bank does not create a positive prohibition against obtaining gold, but only a slight obstacle sufficient to induce applicants to seek other sources of supply if they are unwilling to pay the charge. Still, it is distinctly understood that in case of need gold can be obtained even for exportation at a very slight expense ***

The difference between a complete system of redemption as described above and the Indian system in which the rupee is convertible only for a limited purpose, is important. The characteristic feature of gold exchange system is that the authorities show "a high degree of unwillingness" in giving gold for internal use. In other words, convertibility in the full sense of the term does not exist in India.

* Ibid, p. 522.

The question of making the rupee convertible into gold was considered by the Fowler Committee. The Committee were not in favour of imposing a legal obligation on the Government to give gold for rupees. "This obligation", they wrote, "would impose on the Government of India, a liability to find gold at a moment's notice to an amount which cannot be defined beforehand, and the liability is one which, in our opinion, ought not to be accepted" (section 59). But, as we have seen, the Committee recommended the use of gold as currency, and that "fresh rupees should not be coined until the proportion of gold in the currency is found to exceed the requirements of the public" (section 60). While they did not recommend the cessation of silver coinage they contemplated the establishment in India of a complete system of redemption of the token coins in gold like the French or the American system.

The present writer is convinced that unless the rupee is made fully convertible, the Indian currency system will not become automatic. "Back to the Fowler Committee," should be the watchword of Indian currency reform. The existing system is regarded by some writers as an ideal system, but it has given India an inconvertible token currency which tends to become inflated, it does not enjoy the confidence of the public; and it subordinates the interests of India to those of United Kingdom,—features which an ideal currency system should not possess. The first step in the direction of currency reform and giving India an automatic and self-regulating

system of currency consists in the re-valuation of the sovereign at 15 rupees and making rupees and notes convertible into gold at that rate. The system of redemption will necessarily be indirect at first, but it should be complete and effective. The ultimate goal of the Indian currency system, as defined by the Fowler Committee, should be recognised to be "the effective establishment in India of a gold standard and currency based on the principles of free inflow and outflow of gold". This would involve free and unrestricted coinage of gold in India; the gradual limitation and the final cessation of the coinage of silver by Government, the limitation of the Council Bills sold by the Secretary of State to the amount of the Home Charges, and, when practicable, the legal recognition by Government of the liability to give gold for rupees or notes on demand.

NOTE ON PROFESSOR JEVONS' PLAN
FOR THE STABILIZATION OF
INDIAN EXCHANGE

Professor H. S. Jevons of Allahabad recommends the stabilization of the rupee at 1s. 4d. sterling. He does not recommend the 2s. rate, not because he thinks it cannot be realised, but because to realise it a heavy fall of prices must be brought about, which might prove disastrous. "By taking measures of the kind which I shall

describe," he says, "directed to the reduction of the paper Currency circulation, it would be possible for a stable exchange to be realised at the 2s. level in about two years, the country experiencing meanwhile a drastic fall of prices. I do not say that I recommend this; but wish to show that it is possible."*

It may be useful to consider how it is possible to raise exchange to 2s. Professor Jevons' argument may be summarised as follows. The circulation must be contracted in order to raise exchange. Since it is desired to raise exchange from 16d. to 24d. the general level of prices must be lowered in the same ratio, that is, from 3 to 2. This calculation, he says, "is a matter of simple arithmetic."† It is unnecessary to take into account the volume of bank deposits subject to cheque, because when the currency circulation is reduced in the ratio of 3 : 2, the bank deposits will eventually also fall in the same proportion. Other factors, such as the volume of trade and the velocity of circulation will remain practically unchanged while the currency is contracted. It, therefore, follows that the reduction in the circulation of rupees and notes in the ratio of 3 : 2, must lower prices in the same proportion and raise exchange in the inverse proportion.

Professor Jevons' argument rests on two chief assumptions: (1) that if the circulation is reduced in the proportion of 3 : 2, prices will be lowered in the same proportion and (2) that if prices fall in the ratio of 3 : 2, exchange will rise in the inverse ratio. Both assumptions are untrue.

* *The Future of Exchange and Indian Currency* p 185

† *Ibid* p 186

Professor Irving Fisher's quantity theory of money, which Professor Jevons seems to accept unreservedly, has been examined in chapter X. It has been shown there that the relation between the quantity of circulation and the level of prices is not simple, so that it is impossible to say how much prices will be raised or lowered by a given increase or decrease of circulation. It is not true that the deposits subject to cheque bear a fixed relation to the metallic currency, and that when the circulation is being expanded or contracted, other things remain unchanged. In a country like India, where production is so much subject to the fluctuations of the seasons, the tendency to a fall of prices might be counteracted by shortage in production due to unseasonable rainfall. There is no guarantee whatever that crops in 1923 or 1924 will be normal and not 20, 30, or 40 per cent. below the normal. We have also to remember that the contraction of the circulation in 1920 did not lower prices and that it was accompanied by an increase in the volume of bank deposits. In an earlier chapter Professor Jevons himself says: "The bank deposits increased together with the total circulation till 1919, getting slightly in advance in 1917; but during 1920 deposits continued to increase, in spite of a reduction of the currency circulation"** After quoting index numbers of prices and circulation from 1912 to 1920, he says: "It is noticeable that the slight contraction of the circulation in 1914, following the outbreak of war,

* Ibid p. 44

did not stop the rise of prices, neither did the contraction of the circulation in 1920." †

Secondly, even if we assume that Government, somehow, succeed in lowering prices in the ratio of 3 : 2, it does not follow that the exchange value of the rupee must rise in the inverse proportion, that is, from 16d to 24d. The level of exchange is not determined simply by the level of internal prices but by a complex group of factors among which the foreign demand for a country's produce is perhaps the most important. It may also be pointed out that the rise in the price of silver played a very important part in raising the exchange value of the rupee during the war, and that a fall in the price of silver coincided with the fall in exchange. Even if we wholly ignore the effect of changes in the price of silver on the exchange value of the rupee it would be too much to expect that a mere fall in the Indian price level would raise exchange, unless the fall was accompanied by a very large increase in the European demand for Indian exports. Of this there seems to be little hope as conditions in Europe are still very abnormal and the buying power of the chief European countries is small.

The appreciation of the rupee in terms of gold from 1895 to 1898 was accompanied by some degree of fall in prices, if the rise in the prices of food grains on account of the famine of 1896-97 is ignored. But there was no appreciable correlation between the price movement and

† *Ibid* p. 45

the exchange movement. The experience of European countries like Germany and Austria, whose currency is very much depreciated, confirms the view that there is no precise relation between exchange and the level of prices.

It may be concluded that it is altogether wrong to think that it is possible to raise exchange from 16d. to 24d. by reducing the circulation in the ratio of 3 : 2.

Professor Jevons' plan for raising exchange to 1s. 4d. instead of 2s. and maintaining it at that level is also open to serious objections. Deflation of the currency must form a part of any scheme whose object is to raise exchange, but the success of the scheme must ultimately depend on the Indian balance of trade. It would, therefore, be seen that the economic condition of Europe must be one of the governing factors in determining the exchange value of the rupee. However, a 1s. 4d. rupee is a more practical proposition than a 2s. rupee. The machinery for maintaining exchange at the level of 1s. 4d. which Professor Jevons recommends for adoption is the old machinery with some alterations. The Gold Standard Reserve is to be abolished and incorporated in the Paper Currency Reserve. A part of the augmented Paper Currency Reserve would be kept in the form of sterling securities in England and when, at a time of an unfavourable balance of trade, Reverse Councils are sold in India, they would be paid by the sale of these securities. When the balance of trade was favourable to India, the Secretary of State would sell Council bills in excess of his own require-

ments for Home Charges and the cost of silver needed for coinage, which would be paid in India in notes. The price of the Councils would be fixed "at such a figure as not entirely to stop the flow of gold to India, but so as to prevent so great a flow as would involve the return of gold when the balance of trade became unfavourable"** Professor Jevons also tells us that "the device of holding a part of the Paper Currency Reserve in the form of sterling securities at the disposal of the Secretary of State provides the whole machinery which is necessary to allow for the normal expansion and contraction of the circulating medium in India in substitution for the natural outflow and inflow of gold of the gold standard countries"†

The difference between Professor Jevons' scheme and our pre-war machinery for the maintenance of exchange is very little. As we have seen, the object of the sale of Council bills in excess of the Home Charges in pre-war days was chiefly to prevent the unnecessary flow of gold to India. In Professor Jevons' plan greater use would be made of notes in India for currency purposes, and sterling securities would take the place of gold in the Gold Standard Reserve.

It is somewhat difficult to understand why special efforts are made to devise schemes whose object is to prevent the flow of gold to India. Such a scheme as Professor Jevons' would be an

*Ibid p 218

†Ibid p 217

ideal scheme for India from the point of view of the gold-using countries of the world. Professor Jevons begins the preface to his work with the sentence: "This book is written for readers in India and everything is expressed from the Indian point of view." But it may be asked whether a currency system based on the principle of free inflow and outflow of gold is really irreconcilable with the Indian point of view. The chief objections to such a plan as is recommended by Professor Jevons are that it ignores the Indian demand for a gold currency, and that a currency of token rupees or notes, which are not fully convertible for all purposes, will never fluctuate as a currency of full value coins fluctuates.

Indian Budgets, 1914-15 to 1920-21.

A study of Indian war Budgets shows that the effect of the war on Indian finance was not less important than that on Indian industrial and economic life generally. In a sense, the effect of the war on Indian finance may be regarded as permanent: the increase in expenditure which has necessitated the increase in taxation, which is not of a temporary character, is, directly and indirectly, the result of the war. The war is also responsible for the growth of the Ordinary Debt. Our object here is to indicate the problems connected with Indian expenditure, taxation and borrowing which the Government had to deal with during the war and the subsequent peace years. It will, however, be useful to describe some of the leading features of our finance during the last nine years before attempting a detailed study of Indian budgets since the war.

The separation of Indian from Provincial finance, which was effected on 1st April, 1921, makes it difficult to compare figures of Indian revenue and expenditure since 1921 with those of the pre-war year 1913-14. But a comparison

of Indian revenue and expenditure in 1920-21 with pre-war figures is equally instructive. The total Indian revenue in 1913-14 amounted to £85,207,000, and in 1920-21, to £137,438,000, an increase of 61 per cent. This very considerable increase in revenue was largely the result of substantial additions to direct as well as indirect taxation. The yield of the Income Tax increased from £1,950,000 in 1913-14 to £14,795,000 in 1920-21, and of the Customs, from £7,558,000 to no less than £21,265,000. The Income Tax schedule was completely revised in 1916, and higher rates were imposed on all incomes above Rs. 5,000 a year. This increased the yield of the Income Tax from £2,090,000 in 1915-16 to £3,772,000 in 1916-17. The Income Tax was supplemented by a Super-Tax in 1917, which was levied according to a graduated scale on incomes above Rs. 50,000 annually. The receipts from the Income-Tax (including the Super-Tax) grew to £5,803,000 in 1917-18. A 50 per cent. duty on excess profits earned in 1918-19 was imposed in the Budget for 1919-20, and it raised the Income-Tax receipts to no less than £15,472,000 in 1919-20. There was a re-adjustment of the Super-Tax in the Budget for 1920-21, and in the following year the Income-Tax was again revised.

The Customs schedule was completely revised in 1916-17 and again modified in 1917-18. These changes increased the yield of the Customs from £7,558,000 in 1913-14 to £12,120,000 in 1918-19. The Customs tariff was revised in 1921 and again in 1922.

Of less importance, because of its comparatively small yield, is the 25 per cent. increase in the Salt Duty in 1916.

The increase in taxation was necessitated by constantly increasing expenditure. The total expenditure charged to revenue in 1913-14 amounted to £82,894,000, it increased to £154,777,000 in 1920-21, or by 87 per cent. The table given at the end of chapter XV shows that there has been a general increase in expenditure under practically all the heads. The greatest increase is, however, under "Military Services". Military expenditure amounted to £31,265,000 in 1913-14; in 1920-21, it had increased about three times. It will also be noticed that the greatest increase in military expenditure has taken place since the signing of the armistice in November 1918. In 1917-18, military expenditure was £30 millions, or 41 per cent. greater than the pre-war figure; since the armistice it has about doubled. The increase in military expenditure is one of the causes, though not the sole cause, of heavier taxation since the conclusion of peace.

Much light is thrown on the causes of the growth of military expenditure by an official memorandum on the subject prepared for the benefit of the members of the Indian Legislative Assembly in 1921. We learn from the memorandum that when the armistice was signed, India had an army approximately double the size of the pre-war army, though all expenditure in connection with the excess over her normal pre-war establishments was borne by the British Government. The re-organisation of the army

for peace proved very costly. The reasons are thus explained in the memorandum :—

" In reconstructing the army of the future, the removal of certain anomalies and the remedying of certain defects have been the primary consideration. For instance, it was found that the conditions under which soldiers served required amelioration, the pay had to be made sufficient to attract and retain men and to compare not too unfavourably with the pay of the civil services, the soldier had to be fed, clothed, equipped, and housed in accordance with modern ideas. Further, opportunities for education had to be given to him while still serving, so that he might learn the duties of citizenship and prepare himself for civil life on discharge. It is on these lines alone that India can secure a contented army and thereby an efficient army, for contentment is the foundation of efficiency, and efficiency the first step towards reduction in size. It is a truism that a small army, well paid, well fed, well clothed, well housed, and consequently contented, equipped at the same time with the correct proportions of administrative staffs and services, and therefore capable of rapid expansion in case of emergency, is far more efficient than a larger army which lacks these advantages. If, therefore, a reduction in the strength of the standing army is to be the object in view in India, as it is now in all civilized countries, the first step is to see to it that the army is thoroughly efficient."

It is also pointed out that in view of the troubled state of the Middle East Indian army

cannot be reduced below a certain minimum strength. The Waziristan campaign and other frontier operations have also prevented any large permanent reduction.

The increase in military expenditure may be classified under the following heads :—

(a) The actual cost of the fighting soldier ;

(b) The cost of the Ancillary services, such as Supply and Transport, Medical, etc.

(c) Capital expenditure required in connection with the equipment and housing of the soldier and the improvement of hospitals ; also for the construction of defences and communications . and

(d). Non-effective charges, which include all pensionary charges.

The increase in the cost of the fighting soldier, Indian as well as British, is due to economic causes. The pay of the sepoy has been raised from 11 rupees to 15 rupees a month. The State has further undertaken to feed, house, mount, and equip the sepoy completely. The average pay of the British soldier is now Rs. 1,210 per annum as compared with Rs. 420 in 1913-14. Before the war, the British infantry soldier was paid 1s. a day in the United Kingdom. During the war, the rise in industrial wages, owing to the increase in the cost of living, compelled the British Government to raise the wages of the soldier, and the Government of India must pay to their British soldiers rates based upon the pay which they get in the United Kingdom, where they are recruited. The case of British officers is similar. The increase in the cost of the

Ancillary services is due partly to increases in the pay of the British and Indian personnel, and partly to increase in the strength of the personnel. The increase under pensions is due directly to the war and to the increased scale of pensions for all classes, British and Indian.

Economic causes, traceable to the war, account for a large part of the increase in military expenditure. They are also responsible for the growth of expenditure under another important head—Salaries and Expenses of Civil Departments. The cost of Civil Departments increased from about £ 18 millions in 1913-14 to about £ 30 millions in 1920-21, or by 70 per cent. No one can be blamed for such increase in expenditure. When there is a heavy and general fall in the purchasing power of money, the scale of national expenditure must rise, unless efficiency is to be sacrificed for the sake of economy.

The war was not financed with the proceeds of taxation alone; Government also borrowed large sum of money for war purposes.

The National Debt of India consists of two parts, Productive Debt and Ordinary Debt. The total National Debt on 31st March 1914, amounted to Rs. 411.3 crores, of which only 19.2 crores was Ordinary Debt. Of the 392.1 crores of Productive Debt, 333 crores was represented by Railways, and 59.1 crores by Irrigation. The sums spent on Railways and Irrigation yielded a return far in excess of the interest payable on the entire National Debt. During six years, from 31st

March 1914 to 31st March 1920, the National Debt increased from 411·3 crores to 566·3 crores, as shown below :—

Crores of rupees.

31st March	Ordinary Debt.	PRODUCTIVE DEBT.			Total of Debt.
		Railways.	Irrigation.	Total.	
1914	19·2	338·0	59·1	392·1	411·3
1915	33	349·8	61·6	411·4	414·7
1916	30	351·6	63·6	415·2	418·2
1917	10·5	353·6	64·9	418·5	429·0
1918	132·5	358·8	65·9	427·7	557·2
1919	129·9	365·5	66·7	432·2	562·1
1920	117·8	381·0	67·5	448·5	566·3

It will be seen that the growth of our National Debt during the war was in a great part due to the increase of Ordinary Debt. India's contribution of Rs. 150 crores to the cost of war in 1917 increased the National Debt in 1918 by 30 per cent. With the growth of the National Debt interest charges have also increased. The interest on total debt at the end of March, 1914, amounted to 14 crores, of which only 1 crore was interest on Ordinary Debt. At the end of March, 1922, the interest on total debt had increased to a little more than 25½ crores, of which 9 crores

was interest on Ordinary Debt. The total debt outstanding on 31st March, 1922, was as follows—

		Total Rs.
Sterling	£206,679,245	310,01,88,675
<i>Rupee debt.</i>		
Permanent Debt—		Rs.
6 % Bond	40,59,03,700	
5½% War Bonds	29,17,19,500	
5 % debt.	43,48,64,700	
4 % "	17,12,87,200	
3½ % "	1,19,15,64,891	
3 % "	6,52,80,050	
Other debt	1,00,13,500	2,57,05,83,541
Temporary debt—		
6 % Bonds	37,89,47,000	
5½% War Bonds	10,39,94,100	48,28,71,100
Treasury Bills—		
Issued to public	46,49,10,000	
Issued to Paper Currency Re- serve	54,21,00,000	100,70,10,000
Savings Bank Balances	49,76,51,394	49,76,51,394
Post Office Cash Certificates	4,34,34,756	4,34,34,756

The fluctuations of exchange during the war introduced a new factor into Indian finance. As we have already seen, exchange began to rise in 1917, and it rose to 2s. 4d. in December 1919. The adoption of the report of the Babington Smith Committee led to a further rise, and in February 1920 bills on London were quoted at 2s. 10½d. Then exchange began to fall. In December 1920, it was only a little above the pre-war parity, and

in 1921 it fell below 1s. 4d. The rise in exchange created no financial difficulties. Up to 1st April, 1920, Indian accounts were prepared on the basis of the 2s. rupee, which is still the official exchange rate. The fall in exchange has proved very troublesome. The 'gains by exchange' have been replaced by 'losses by exchange' which amounted to 323 lakhs in 1920-21 and 903 lakhs in 1921-22 (Revised Estimate), and which are estimated at 995 lakhs in 1922-23. These are losses charged to revenue. The total loss incurred on Net Expenditure of the central Government in England, including capital expenditure on Railways, Posts and Telegraphs and Irrigation, is of course greater, as can be seen from the following account of Exchange in the Budget for 1922-23:—

(a)	Net expenditure of the Central Government in England in 1922-23 ..	£ 30,742,600
(b)	Rupee equivalent of above at 2s. per rupee, the rate adopted for conversion in the accounts ..	Rs. 30,74,26,000
(c)	Rupee equivalent of (a) at 1s. 4d. per rupee, the average rate assumed for the year 1922-23 ..	Rs. 46,11,39,000
(d)	Difference between (b) and (c) representing adjustment for exchange ..	Rs. 15,37,13,000

(e) Deduct amount charged to Railways, Posts and Telegraphs and Irrigation	Rs. 5,41,63,000
(f) Balance chargeable to the head "Exchange" and in respect of non commercial heads	Rs. 9,95,50,000

The losses by exchange are, however, more artificial than real. They are wholly due to the fact that Indian accounts are not prepared on the 1s. 4d. basis, when this is done, they will automatically disappear.

The Effect of the Outbreak of War on Indian Finance.

The following tables show the effect of the outbreak of war on Indian finance —

In millions of £
Budget for 1914-15.

	Imperial	Provincial	Total
Revenue	54.237	30.842	85.079
Expenditure	52.981	34.046	87.029
Surplus or Deficit	+1.256	-3.206	-1.950

Revised Estimates, 1914-15,

	Imperial	Provincial	Total
Revenue	49,927	30,229	80,156
Expenditure	52,669	32,446	85,115
Surplus or Deficit	-2,742	-2,217	-4,959

It will be seen that the Budget estimate provided for a total Imperial revenue of about £54½ millions, while the Revised estimate showed a revenue of only about £50 millions or a decrease of £4½ millions. The decrease was due to the war, the chief cause of it being the decline under Railways and Customs, which were seriously affected by the dislocation of trade consequent upon the outbreak of war. As regards the decline in the Provincial revenue, there was a heavy fall under Excise (£266,000), Land Revenue (£255,000), Stamps (£167,090) and Forests (271,000). The decline in the Provincial revenue as compared with that in the Imperial revenue was small. It was natural that Imperial revenue should suffer more by the outbreak of war as it is more dependent on trade conditions which are largely affected by war. The war converted an anticipated Imperial surplus of £1½ millions into a deficit of £3½ millions. Combin-

ing the Imperial and Provincial sides, the total deficit, as shown by the Revised estimate, was about £ 5, millions, as compared with the anticipated deficit of about £ 2 millions.

The Finance Member estimated that in 1915-16 the total revenue, Imperial and Provincial, would be £ 80,400,000, and the total expenditure, £ 84,435,000, resulting in a deficit of £ 4,035,000. He, however, proposed no additional taxation to cover this deficit, for which he gave the following explanation in his Budget speech.—

"The first method of adding to our resources which would naturally suggest itself—one, indeed, which we have very seriously considered—is to follow the lead of the mother country and impose special taxation, and I have no doubt that the majority of the members of this Council have been asking themselves for sometime past what line we shall take on this question. Those who have followed my remarks on the revenue position, will, however, have already had their anxiety relieved. We do not propose on this occasion to raise any money by increased taxation. We should not hesitate to do so to meet a deficiency in revenue which promised to be of a more or less abiding character. But the present circumstances are altogether peculiar. We know that, ordinarily, we can count on surpluses. India too has a very small unproductive debt; and with trade conditions depressed, and the present abnormal rise in food prices in a large part of the country, we have come to the conclusion that we ought not to add to existing taxation unless it is absolutely necessary. We hold that this

necessity has not yet arisen," since the deficits of the current and coming years are, as already stated, entirely the product of special and temporary circumstances; while as regards ways and means, we see our way, in spite, of these deficits, to financing all outlay immediately necessary. We have to bear in mind, too, in dealing with an essential point of policy like this, the possibility that an improvement of conditions, whether by the conclusion of peace or otherwise, may, after all, take place sooner than we are yet entitled to assume. When this occurs, we shall, I have no doubt, rapidly regain at any rate a large portion of the savings banks deposits which have been withdrawn from us, and may hope for improvement in other directions as well".

THE BUDGET FOR 1916-17.

The Finance Member hoped that the war would end before the close of the financial year 1915-16, and that was his main reason for not proposing additional taxation. But the war was not to end so soon, and increase of taxation could not be avoided. The Revised estimate for 1915-16 showed a deficit of £ 2·7 millions as compared with the anticipated deficit of about £ 4 millions. The deficit in 1916-17 was expected to be £ 2½ millions if there was no taxation. There was every probability that the war would continue throughout 1916-17. "The war continues", said the Finance Member in proposing additional taxation, "and we cannot go on year after year with uncovered deficits". He reminded the House of what he had said in

in this connection a year ago, that, if it became necessary, additional taxation would be imposed. The new taxes took the form of an increase in import duties, an additional duty of 4 annas a maund on salt, and the imposition of higher rates on incomes above Rs. 5,000. The general tariff was raised from 5 per cent. to $7\frac{1}{2}$ per cent. *ad valorem*, except in the case of sugar, which was raised to 10 per cent. The free list was curtailed materially, and special duties were imposed upon wines and spirits and tobacco. The only important article whose imports were not affected by the revision of the tariff was cotton. It was felt that the proposal to increase the duty on piece goods, which stood at $3\frac{1}{2}$ per cent., would be "most unfortunate, as it would provoke a revival of old controversies at a time when they specially desired to avoid all contentious questions both here and in England, and might prejudice the ultimate settlement of the larger issues raised by the war". Export duties were at the same time imposed on tea, raw jute and manufactured jute. The revision of the tariff was expected to yield £ 2·1 millions.

The chief features of the Income Tax Act of 1886, which it was proposed to amend were as follows.—

The Act exempted

- (a) Incomes derived from land assessed to land revenue and from agriculture.
- (b) Incomes derived from property solely employed for religious or public charitable purposes.

(c) Salaries of officers and soldiers employed in a military capacity when these do not exceed Rs. 500 a month, or Rs. 6,000 a year.

(d) All incomes which would otherwise be taxable if these are less than Rs. 1,000 a year.

Originally only incomes which were less than Rs. 500 were exempt, but the limit was raised to Rs. 1,000 in 1903.* Incomes between Rs. 1,000 and Rs. 1,999 paid 4 pies in the rupee, and incomes above that amount 5 pies in the rupee.

The new proposals left all incomes of less than Rs. 5,000 a year untouched. Incomes from Rs. 5,000 to Rs. 9,999 were charged 5 pies in the rupee, incomes from Rs. 10,000 to Rs. 24,999 were charged 9 pies in the rupee, and incomes of Rs. 25,000 and upwards, 1 anna in the rupee. Profits of companies were charged at the anna rate, but this was subject to abatement, or exemption, to individual shareholders who could show that their total income was such as to warrant a lower rate of taxation or none at all (that is, if income from all sources was less than Rs. 1,000 a year). Interest on securities was taxed similarly, *i.e.*, the initial rate was 1 anna, but the holders could obtain refunds of the whole or part of sum recovered with reference to their actual income of all kinds. The increased taxation of income was expected to yield £ 900,000.

The changes in the Income Tax affected a very small number of persons. The total number of income tax assessees in 1914-15, counting companies as persons, was about 332,000.

Of those about 216,000 were assessed on incomes between Rs. 1,000 and 1,999, and 79,000 between Rs. 2,000 and 4,999. Thus no less than 295,000 assessees under the Income tax were unaffected by the new rates of taxation.

The yield of the new taxes was estimated to be a little over £ 3·6 millions as under —

(a) £ 2,150,000 from Customs and consequential changes in the excise duties on liquors.

(b) £ 600,000 by the enhancement of the duty on salt.

(c) £ 900,000 by the increase under Income Tax.

The Budget, as finally passed, showed an Imperial surplus of £ '826 million, and a total surplus of £ 473 million.

Ways and Means.

In the Way and Means estimate for 1915-16, £9·4 millions had been provided for capital outlay. But reasons of economy compelled Government to cut down their railway programme and to reduce the outlay on irrigation, so that no more than £6·1 millions was spent under capital outlay. On the resources side, while it was expected that the Secretary of State would be able to raise £ 6·5 millions by a sterling loan in England, the actual sum realised was only £ 3·1 millions. The Ways and Means estimate for 1916-17 was, therefore more modest and less optimistic than that for the preceding year. Capital expenditure was cut down to "the lowest possible limit"— £ 3 millions was allowed for railways and £ 1·2 millions for irrigation and Delhi. There was to

be no sterling loan. A rupee loan carrying interest at 4 per cent. and redeemable in ten or fifteen years at the option of Government, was to be issued. It was expected to yield £ 4·3 millions, the actual yield was £ 4·22 millions, exclusive of the sum subscribed through the Post Office savings banks £ 216,645.

The Revised Estimate for 1916-17.

As compared with the Budget estimate, the total revenue for 1916-17, as shown by the Revised estimate, was found to be £ 10·226 millions greater, but expenditure had also increased, with the result that the total surplus amounted to £ 7·299 millions.

A great part of the increase in revenue was due to an unexpected increase of over £ 4 millions under Railways. The rains had been good and trade and economic conditions were more favourable than in the preceding year. Further, the absence of competition from the coasting trade, which meant more traffic for the railways, swelled railway receipts. The increase under Customs also reflected the more favourable trade conditions. Opium and salt also yielded more revenue; in the first case, higher prices were realised at the auction sales in Calcutta and for medicinal opium sold in England, and in the second, there was increase in the demand for salt of local manufacture owing chiefly to a decline in the import of salt into Bengal. The increased rupee coinage during the year yielded a little more than £ 1 million, while the expansion of postal business and increase in the number of field service tele-

grams produced an additional £ 300,000. The increase in expenditure was chiefly due to an increase of about £ 4 millions under Military Services.

The ways and means position was also satisfactory. With their improved resources Government were able to extinguish their total emergency war indebtedness, which amounted to £ 4 6 millions. Capital expenditure in 1916-17 was only £ 2 4 millions, as compared with £ 2 4 millions, the estimated outlay. Owing to difficulties of obtaining material, railway capital expenditure was one half of the estimated expenditure.

BUDGET FOR 1917-18

For 1917-18 the Finance Member estimated an Imperial surplus of £ 28 millions, if there was no increase in taxation. But in view of the proposed financial contribution to the war by India, a larger surplus was required.

India's Financial Contribution to the War

Up to the end of 1916-17 India's total net contribution towards the cost of the war, in respect of the Expeditionary forces, was about £ 11½ millions, which was expected to increase to £ 15½ millions by the end of 1917-18. Under Section 22 of the Government of India Act, which forbids the application of the revenues of India to defraying the expenses of any military operations carried on beyond the frontiers of India, except for preventing or repelling an actual invasion, or in the case of some other sudden or urgent necessity, India could claim this amount from England, and,

a special Resolution had to be passed by the Parliament in order to give effect to the proposal of the Indian Government that India should bear the cost of the Expeditionary forces employed out of India. Further, very heavy payments were made in India by the Government on behalf of the British Government for purchases made in India by the latter, while a large part of the receipts were re-lent to the British Government. The total sum invested in British securities by India since the beginning of the war up to the end of 1916-17 amounted to £ 46½ millions, of which £ 36 millions represented wholly new investment. The Government of India, however, felt that India might make a further direct financial contribution towards the cost of the war, and at the beginning of January 1917, the Viceroy addressed a telegram to the Secretary of State suggesting that the Government were prepared to accept an ultimate special contribution of £ 100 millions to the war. The recurring liabilities which this special contribution involved amounted to £ 6 millions annually.

The Imperial surplus was estimated to be about £ 2½ millions, therefore more than £ 5 millions had to be raised in 1917-18 by means of additional taxation.

The New Taxes.

The new taxes proposed by the Finance Member, and accepted by the Council, were, a super-tax on the largest incomes, higher duties on the exports of jute and imports of cotton goods, and a surcharge on railway goods traffic.

The super tax supplemented the ordinary income tax. It affected incomes exceeding Rs 50 000 annually and was levied in an ascending scale as given below —

For every rupee of the first	
Rs 50 000 of the excess, i.e. between Rs 50 000 and	
1 lakh	1 anna per rupee
For every rupee of the next	
Rs 50 000 of the excess i.e. between Rs 1 and 1½	
lakhs	1½ annas per rupee.
For every rupee of the next	
Rs 50 000 of the excess i.e. between Rs 1½ and 2	
lakhs	2 annas per rupee
For every rupee of the next	
Rs 50 000 of the excess i.e. between Rs 2 and 2½ lakhs	2½ annas per rupee
For every rupee of the excess i.e. on everything over	
2½ lakhs	3 annas per rupee

The duties on raw and manufactured jute imposed in 1915-16 were doubled. It was expected that in view of our monopolist position in respect of jute product on the Indian exporter of jute would be able to pass on the duties to the foreign consumer.

The duty on the import of cotton goods was increased from 3½ to 7½ per cent *ad valorem* which was the general tariff rate. The cotton excise duty was not raised and it remained at 3½ per cent.

A surcharge on railway goods traffic was imposed at the rate of 1 pie a maund on coal, coke and firewood, and two pies a maund on other articles.

The additional taxes were estimated to yield £3½ millions in 1917-18.

The Budget for 1917-18 as finally passed anticipated a total revenue of £98,871 millions against a total expenditure of £98,833 millions, and thus a surplus of £038 million. These figures include, as regards Imperial transactions, £6 millions on account of the war contribution and £3½ millions of additional taxation.

In the Ways and Means estimate provision was made for capital expenditure on Railways, Irrigation and Delhi of £45 millions, of which £36 was intended for railways. The revised estimate showed that the actual capital expenditure fell short of the Budget estimate by £600,000.

The Revised Estimate for 1917-18.

In introducing the Financial Statement for 1918-19 the Finance Member said—

"The general situation I have now to describe is, in many ways, similar to that outlined in my speech last year. The revenue position is again excellent. Our Railway receipts have once more broken the record, and far exceeded the figure estimated in the current year's Budget. The result is that we are able to face with equanimity a considerable increase in military charges. Our financial embarrassments, as I shall presently show, are mainly due to His Majesty's Government constantly increasing ex-

penditure which is repaid to the Secretary of State at Home. Simultaneously there is serious and growing demand on our resources to finance the shipment of materials required for the prosecution of the war, and of the food stuffs which the Allies and many portions of the Empire are drawing from India. The account which I shall give later on of the calls which we have had to meet will be a sufficient indication of the anxieties which the year now coming to a close has brought with it. . "

The total Imperial revenue in 1917-18 was about £ 10 millions greater than the figure taken in the Budget, while Imperial expenditure had increased by about £ 4½ millions. Nearly half the increase in revenue was due to Railways. The rise in exchange was a source of considerable gain, but the rise in the price of silver increased the cost of the rupee coinage. Allowing for the loss on coinage, there was a net gain by exchange of about £ 1 million. Under Salt there was an increase of nearly £ 1½ millions, due to large advance payments in Northern India to secure priority of issue from the stock there. The rise of prices which swelled the value of our foreign trade and thus affected the *ad valorem* duties, brought an increase of over £ 1·7 millions under Customs. With the exception of Opium, which showed a considerable decrease, the other heads of revenue showed a material increase.

There was an increase in Imperial expenditure of £ 4·6 millions, chiefly under Military charges. On the Provincial side, there was a surplus of about £ 2·3 millions.

Borrowing in 1917-18.

In order to discharge India's war contribution of £100 millions, promised to the British Government in January 1917, a war loan had been floated. The proceeds of the loan were to be handed over to the British Government, and the balance was to be defrayed by debt. The War Loan produced £36·1 millions. The Presidency Banks rendered valuable help to the Government in raising the Loan.

In order to meet heavy payments incurred on behalf of the British Government and the Secretary of State's Council bills, Treasury bills were issued in India in October 1917 which could be taken at option for periods of 6, 9 or 12 months. Including a special temporary loan taken from the Bank of Bombay, Government expected to raise in this way £30 millions by the end of the financial year 1917-18. The total payments made in India in 1917-18 for Council bills and on behalf of the British Government and other countries amounted to no less than £111 millions.

THE BUDGET FOR 1918-19.

The Budget estimate for 1918-19 as finally passed is given below.—

In millions of £

	Imperial	Provincial	Total
Revenue	74,303	34,887	109,190
Expenditure	71,721	34,756	106,477
Surplus	+2,582	+131	+2,713

The Finance Member, it will be seen, estimated a total surplus of £ 2 $\frac{1}{2}$ millions. He did not propose any additional taxation. In the Ways and Means estimate he provided £ 5 millions for capital expenditure and £ 5.9 for discharge of debt.

The borrowing programme for 1918-19 consisted in the issue of a second war loan, the proceeds of which were to be entirely handed over to the British Government in payment of India's contribution of £ 100,000,000. The second war loan, as, the first, was for an unlimited amount. Three material advantages to India and the Empire were expected from raising a large war loan in India, first, it would give fresh money to the British Government for the conduct of the war and thus India's contribution would be more useful than if she merely took over a portion of

the previously existing British war debt; second, it would assist the Government of India in obtaining funds for the financing of war expenditure in India to meet the needs of the British Government and third, India would gain economically by her contribution being raised by borrowing in India, for, in this case, interest on the loan would be disbursed in India, while if she took over a portion of the British debt, the interest would be lost to the country.

The main section of the loan (i.e., exclusive of the Post Office section) yielded about Rs. 51½ crores.

Revised Estimate for 1918-19.

"It is doubtful," said Sir James Meston in the course of his remarks on the characteristics of the year 1918-19, while introducing the Financial Statement for 1919-20, "whether in the financial history of British India there has been a year of more diversified character, or varied difficulties, than 1918-19." The year was, as the Finance Member characterised it, "a period of crisis and dramatic change." At the beginning of the year the long threatened German offensive was developing in France, and every effort was made in India to supply men and munitions for the Allied armies. The first half of the year was a period of great trade activity. There were heavy exports of food-stuffs and other articles of national importance. Railway receipts increas-

ed, and on account of the heavy sales of bills by the Secretary of State at rising rates of exchange gains by exchange were large. In September 1918, high hopes were formed of a record surplus at the close of the financial year. But then came the cessation of hostilities, and with it the trade depression. The monsoon also failed and the influenza epidemic took a heavy toll of life, which seriously weakened agricultural power. The shortage of supplies checked exports and the Secretary of State stopped the sales of Council drafts after October. All this reacted on Indian finance. One of the direct effects of scarcity was the remissions and suspensions of land revenue. The total Imperial share of the loss under Land Revenue amounted to £ 1 million. However, Railways, Customs and Mint showed an increase of revenue, thanks to the favourable conditions during the first half of the year. Sir William Meyer had budgeted for a total Imperial revenue of about £ 71½ millions, giving a surplus of over £ 2½ millions. The Revised estimate showed that the revenue was better by £ 11 millions, but the expenditure had increased by £ 18 millions, with the result that instead of the anticipated surplus there was a deficit of £ 4½ millions. The increase in expenditure was due to the liability accepted in September 1918 for the cost of 200,000 additional Indian troops which amounted to £ 12½ millions.

The Ways and Means position in India in 1918-19 was one of some difficulty and great complexity. The funds provided by the Government for remittance purposes in 1918-19 reached a

total of no less than £ 141.3 millions, including £72.7 millions war outlay on behalf of the British Government recoverable in London and £ 20.6 millions of Council bills.

BUDGET FOR 1919-20.

The framing of Budget estimates for a year immediately following the cessation of hostilities is a matter of no small difficulty. These were graphically described by the Finance Member in his speech introducing the Financial Statement.

"The task of forecasting our resources and requirements for next year is unusually perplexing. On the military side there is no experience to guide us in calculating the legacies of a great war. The peace and cost of demobilization, the future strength of the army and its reserves, the new equipment which the lessons of the war will force upon us—all these are uncertain. On the civil side, our external trade is largely governed by shipping, which may or may not be available, and there is thus no estimating with any confidence for our customs revenue, our gains or loss by exchange, etc. Our internal trade will be affected by scarcity, and may be seriously hit by a slump in prices hence uncertainty about our Railway earnings and other important heads of revenue. After the strain and artificial conditions of recent years it is not easy to speculate how far the rebound will go or what directions it will take, and the only thing that is certain is that we must incur a large expenditure to recover the ground which has been lost in a period of severe economy."

The Finance Member, however, thought that there was no cause to be very pessimistic about the year 1919-20. India had made money during the war, and was well-prepared to meet a period of depression. He therefore took an optimistic view of Indian revenues, and allowed for a substantial increase under the majority of the more important heads of revenue. He estimated the revenue in 1919-20 to be £ 80 millions, or £ 5 millions less than the estimated expenditure, £ 85 millions. To fill this gap and in order to get a surplus he asked the Council to impose a 50 per cent. duty on excess profits earned in 1918-19. The loss of super-tax since super-tax and excess profits duty were not to be assessed on the same business) he estimated to be £ 1 million, and of the Income Tax (since a rebate was to be given for the purpose of this tax in respect of the amount paid as excess profits duty at £ 450,000. Allowing for these losses, the receipts of the excess profits duty were estimated to be about £ 6 millions. The Budget as finally passed anticipated a surplus of £ 600,000.

Under Ways and Means the Finance Member provided for a capital outlay on railways of £ 17.7 millions, which was far in excess of the largest railway programme (£ 12 millions) ever previously undertaken. He proposed to raise a loan in India of Rs. 15 crores (the sum realised was 21 crores) and to discharge Treasury bills amounting to £ 8 millions, and liquidate a certain amount of the temporary liabilities of Government apart from Treasury bills.

Revised Estimate for 1919-20.

In framing the estimate of revenue and expenditure for 1919-20 the Finance Member (Lord Meston) had taken an optimistic view of the financial situation. The Revised estimate showed that his optimism was justified. It is true that owing to scarcity, resulting from the failure of the monsoon in 1918, famine had to be declared in 12 districts of British India, but the monsoon of 1919 was good, which relieved the immediate scarcity, though it did not lower the prices of food stuffs. Economic conditions generally in 1919-20 were favourable to trade. The improvement in freightage and traffic facilities led to the expansion of both imports and exports. The exporters, particularly, did very well, and India had a record balance of trade in her favour at the close of the financial year (1919-20). Another proof of growing industrial activity was furnished by the record number of company floatations during the year. As the result of the improved conditions of trade, receipts under Railways and Customs and Income Tax were greater than the figures taken in the Budget. The net result was that Imperial revenue was Rs 135½ crores against an estimated total of Rs 129½ crores. The ordinary expenditure (excluding Military services) amounted to Rs 69 crores against an anticipated total of Rs. 64 crores. But the total expenditure including the Military services was much greater than the anticipated expenditure. Lord Meston had expected a surplus of £ 600,000, Mr (now Sir) W. M. Hailey announced a deficit of £ 14½ millions. The explanation of the deficit was given

in the following passage of the Financial Statement for 1920-21 :

" In presenting the military estimates for the current year it was assumed that the year 1919-20 would be one of demobilization. Unfortunately, as the Council are well aware, this anticipation has not been realised. We were compelled not only to postpone the disbandment of considerable bodies of additional troops which were raised in India in 1918, but also to adopt every expedient which economises human life at the expense of mechanical contrivances, and which makes life more comfortable on field service. High prices ruled everywhere and these affected not only the cost of material but the cost of our Indian recruits, including followers. But the expenditure was unavoidable; when it is a question of war, purely financial considerations must give way "

The Afghan war cost £ 14 $\frac{1}{4}$ millions. It was entirely responsible for converting a small anticipated surplus into a big deficit.

The Afghan war had another important effect on our finance. Lord Meston had hoped to reduce the Treasury bill outstandings of Government during 1919-20 by about Rs. 22 crores. But owing to the Afghan war and frontier operations, the Government, so far from discharging the Treasury bills, had to issue fresh bills, and in October, their outstandings had grown from 49 $\frac{1}{2}$ crores on April 1 to no less than 68 crores.

In 1919-20 the Government of India provided funds amounting to 130 crores in India in connection with remittance transactions. But the

difficulty of financing these transactions was now much less than during the preceding two years, when Government's cash balances were locked up in London and could not be transferred to India. With the cessation of hostilities in Europe and the gradual removal of war restrictions, it became possible for the Secretary of State to retransfer his surplus balances to India by means of gold remittances. With their receipts of gold from the Secretary of State and the proceeds of the sales of Reverse Council bills, Government met Rs. 80 crores of liabilities out of a total of 130 crores, and they had to find only 50 crores by other means.

Gains by Exchange

The gains by exchange in 1919-20 amounted to no less than Rs. 22½ crores, as compared with 13½ crores in 1918-19. This was due to the fact that the Government of India's accounts were kept throughout the year 1919-20 (as in previous years) on a 1s 4d basis, while the exchange during the greater part of the year was much above 2s.

From the gross gains by exchange certain losses must be deducted in order to find the net gains. There was a loss of Rs. 4½ crores on rupee coinage on account of the rise in the price of silver, and 6½ crores on gold purchases, acquisition and sales arising from the premium over sterling parity at which the Secretary of State made his gold purchases. The net gains were thus reduced to Rs. 11½ crores. Of this amount Government decided to credit Rs. 7½ crores to the Railway, Irrigation and Delhi capital account. The remaining sum of Rs. 4½ crores was appropriated for

meeting, in part, the loss arising from the revaluation on a 2s. basis of that portion of the Paper Currency Reserve which was kept in the form of sterling securities or gold. The rise of exchange reduced the value in rupees of all sterling holdings of the Government, and the loss from the revaluation of sterling securities alone held in the Paper Currency Reserve was estimated at Rs. 21 crores.

BUDGET FOR 1920-21.

The Finance Member estimated the total revenue, Imperial and Provincial, to be £ 134.2 millions and expenditure £ 132.2 millions, leaving a surplus of £ 2 millions. The estimate assumed the discontinuance of the Excess Profits Duty which was imposed as a temporary measure in March 1919. No new taxes were imposed, but there was a readjustment of the super tax.

In the Budget for 1918-19 provision had been made for £17.7 millions for Railways. Of this amount, owing to the failure of English supplies, £ 14.5 millions was spent, which sum was reduced to £10,211,000 by gains of exchange. For 1919-20 the Finance Member raised the provision to £ 18 millions for expenditure in England, and Rs. 4½ crores for expenditure in India. The major portion of the total sum was to be utilised for increasing traffic facilities to enable the railways to meet the increased demand on their resources on account of the revival of trade.

General Characteristics of the Year 1920-21.

The year 1920-21 was a period of trade depression. The trade boom of 1919 had passed away. We have seen that in 1919-20 India had a record balance of trade in her favour. Owing to the changed conditions of 1920-21 the balance of trade had turned against India, and the excess of imports over exports amounted to no less than 49 crores. The exchange fell steadily during the year. One effect of the fall in exchange was the increase in the sterling obligations of the Government. Government accounts were now kept on a 2s. basis while the average rate during 1920-21 was about 1s. 9d. The monsoon of 1920 was poor.

The Budget for 1920-21 as finally passed anticipated a total revenue of Rs. 132 crores against an expenditure of Rs. 130 crores. The expenditure however included an item of Rs. 8 $\frac{1}{4}$ crores representing an appropriation from revenue for meeting the deficiency in the Paper Currency Reserve caused by the revaluation on the 2s. basis of its sterling position. It was subsequently decided to meet this deficiency not from revenue, but by appropriating the income from the Currency investment with effect from 1921-22, so that Rs. 8 $\frac{1}{4}$ crores set apart for this purpose must be added to the anticipated surplus. The Revised estimate however showed a deficit of Rs. 11 $\frac{1}{4}$ crores. The deficit was due to a decrease under most of the revenue heads, with the exception of Customs and Taxes on Income. The net receipts

from Railways were Rs. 7½ crores less than the amount anticipated, chiefly owing to the increase in the working expenses. The greater part of the deterioration of Rs. 22 crores was, however, the result of the increase in the military expenditure. Against a Budget provision of Rs. 52.2 crores the actual expenditure amounted to no less than Rs. 70.4 crores. The occupation of Waziristan and other frontier operations were responsible for the increase.

The year 1920-21 was the third deficit year, the deficit in 1919-20 was 28 crores, due to the Afghan war and in 1918-19, 6 crores. The financial situation was thus steadily growing from bad to worse. The Finance Member emphasised the danger of financing deficits by increasing the floating debt of the Government in the following passage of his Budget speech —

'The deficits including that of the current year have been, or are being met either by increasing our floating debt i.e., by issuing treasury bills to the public or by increasing fresh currency notes against the security of treasury bills created *ad hoc*, i.e. against our own I.O.U's. I feel confident that the House will agree with me that it is impossible to allow this process to proceed further. The path which the necessities of the war, and the chaotic conditions of the world's trade and exchanges which followed the termination of the war, have forced us to tread, is a broad and easy one, but, if followed continuously, can only lead to national bankruptcy. Certain of the countries of the world have slipped so far down the hill of financial demoralisa-

sation that it needed the International Conference at Brussels to emphasise this elementary fact. It is true that India has sinned less than most other countries; it is also true that our recent deficits have in the main been due to war or warlike operations on our frontiers. But the fact remains that we have been outspending our income, and unless we take early steps to make both ends meet we shall assuredly find sooner or later, that, with our revenues mortgaged and our credit impaired, not only will there be no money for the development, moral and material, which India so greatly needs, but it will even be difficult to carry on the administration at its present level of efficiency".

The Finance Member also referred to the effect of the Reforms upon Imperial finance. If the new classification, which came into force on 1st April 1921, had been in existence in 1920-21, then, according to the Budget estimates of revenue and expenditure, the Provinces, after paying to the Central Government the contributions fixed by Parliament, would have had in the aggregate Rs 11 crores more revenue at their disposal, and therefore the Central Government 11 crores less. There was thus an imperative need for increasing the resources of the Central Government.

Indian Finance since 1st April, 1921.

The first of April, 1921, is an important date in the history of Indian finance, as it marks the separation of Imperial from Provincial finance. In the Budgets that we have discussed in the preceding chapter, provincial figures were included in the Indian Budget. There was a close connection between Imperial and Provincial finance before the recent grant of financial autonomy to the Provinces. Certain heads of revenue were divided equally between the Imperial and Provincial Governments, the remaining sources of revenue were entirely Imperial or entirely Provincial. In most of the Provinces the divided heads were land revenue, excise, stamps, income tax and the income from the large irrigation works. The entirely Provincial heads were: forests, registration, the receipts under the spending departments managed by Local Governments such as ordinary public works, police, education, medical, courts and jails. The following sources of revenue were wholly Imperial opium, salt, customs, mint, railways, posts and telegraphs, military receipts and tribute from Native States. Like heads of revenue, some of the heads of expenditure were commonly shared by Imperial and Local Governments, while the others were entirely Local or Imperial. The responsibility

for all outlay connected with defence, railways, interest on debt, posts and telegraphs and the Home Charges rested with the Imperial Government; the Provinces were responsible for expenditure relating to land revenue and general administration, education, the medical department, police, jails and forests. The common heads of expenditure were irrigation and ordinary public works.

The Imperial Government, further, acted as a banker to the Provincial Governments, as it kept their balances. These balances consist of large grants made by the Imperial Government to the Provinces in the past for expenditure on education, irrigation, sanitation, agricultural and veterinary development and other similar objects. Provincial Governments could not spend the money at once and the result was the accumulation of balances which in 1920-1 amounted to Rs 7,68 lakhs.

The abolition of divided heads involved the disappearance of Provincial figures from the Indian Budget. Land revenue, irrigation, stamps and excise have now become wholly Provincial, and the income tax wholly Imperial.

The main reason for this important change in our financial system was that the political autonomy of the Provinces under the Reforms scheme would have been incomplete without financial autonomy. The authors of the Indian constitutional reforms thought that the Provinces should not be dependent on the Central Government for carrying out any schemes of Provincial development. They attached very little importance to the argument that the authority of the

Government of India would be lowered if the Provinces were freed from the financial control which it exercised over them. On the other hand, they thought it was impossible that the old system should work successfully under the new conditions, as a large popular element had been introduced into the government of the Provinces while the Central Government was still an "Official Government."

As a result of the proposed financial changes a large deficit in the Indian budget was anticipated. This was to be met by annual contributions of fixed amounts from the Provinces to the Central Government. The rules framed under the Government of India Act (Sec. 45. A), in accordance with the recommendations of the Meston Committee, provided for a total Provincial contribution of 9,83 lakhs in the financial year 1921-22 as follows —

Name of Province.	Contribution in Lakhs of Rupees.
Madras	348
Bombay	56
Bengal	63
United Provinces	240
Punjab	175
Burma	64
Central Provinces and Berar	22
Assam	15
Behar and Orissa	Nil
Total	983

These initial contributions were levied on the basis of the net additional revenues with which

each province has been endowed by the new financial arrangements. It will be seen that the contribution made by Madras, the United Provinces and the Punjab was heavy, but it should be remembered that the contribution was not, as the Merton Committee put it, 'some new and additional burden extracted from the wealth of the provinces. Those provinces which contributed most to the Imperial deficit were also the largest gainers under the new financial scheme, as is shown by the following table -

In lakhs of rupees.

Province	Net fiscal responsibility power under new dis- tribution of revenue	Contributions in 1910-11 manded by Merton Committee	Percentage of total con- tribution	Imperial responsibility power left after pay- ment of contribution
Madras	516	348	39 4/5	228
Bombay	90	56	51/5	37
Bengal	104	63	61/5	41
United Provinces	397	240	24 1/5	157
Punjab	263	175	16 1/5	114
Burma	246	64	61/5	182
Behar and Orissa	51	Nil	51	51
Central Provinces	32	22	2 1/5	30
Assam	42	12	1 1/5	27
Total	1,520	963	100	867

From the year 1922-23 onwards the total Provincial contribution will be 983 lakhs "or such smaller sum as may be determined by the Governor General in Council." The percentage of this total amount to be paid in each year by each Local Government has been fixed according to the following scale:—

Name of Province.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28 and thereafter.
Madras	32 $\frac{1}{2}$	29 $\frac{1}{2}$	26 $\frac{1}{2}$	23	20	17
Bomhay	7	8	9 $\frac{1}{2}$	10 $\frac{1}{2}$	12	13
Bengal	8 $\frac{1}{2}$	10 $\frac{1}{2}$	12 $\frac{1}{2}$	15	17	19
United Provinces	23 $\frac{1}{2}$	22	21	20	19	18
Punjab	16 $\frac{1}{2}$	15	13 $\frac{1}{2}$	12	10 $\frac{1}{2}$	9
Burma	6 $\frac{1}{2}$	6	6 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$
Behar and Orissa	1 $\frac{1}{2}$	3	5	7	8 $\frac{1}{2}$	10
Central Provinces and Berar	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5
Assam	1 $\frac{1}{2}$	2	2	2	2	2 $\frac{1}{2}$

In cases of emergency a Local Government may be required by the Governor General in Council, with the sanction of the Secretary of State, to pay to the Central Government a contribution for any financial year in excess of its fixed quota for that year. The contributions are a first charge on Provincial revenues.

In determining the scale of standard contributions, to be levied from 1927-28 onwards, the Meston Committee took into consideration the indirect contributions of the provinces to the Government of India, and in particular, the incidence of customs duties and of income-tax, the industrial and agricultural wealth of the provinces with due regard to their liability to famine, and the capacity of each province for expansion and development agriculturally and industrially. The Committee recommended that the provinces should be called upon to contribute the standard ratio after an interval of time sufficient to enable them to adjust their budgets to the new conditions, and that the process of transition from the initial to the standard ratio should be continuous, beginning in the second year of contribution and proceeding in six annual steps, as shown by the table above.

The provincial contributions are not intended to be permanent. It is expected that the Central Government would be gradually able to reduce the deficit due to the new financial arrangements, and when this deficit no longer exists, the contributions will also cease. However, the state of finances of the Central Government does not encourage the hope that it will be able to do without the contributions in the near future.

The effect of the new arrangements on the finance of the Central Government may be shown by an example. In 1920-21, the total Indian revenue amounted to Rs. 23,216 lakhs and the total expenditure to Rs. 23,127 lakhs (including Provincial figures). The principal

heads of revenue, land revenue, opium, salt, stamps, excise, customs, income tax and 'other heads' contributed 135,26 lakhs to the total revenue. If the new financial arrangements and classification had been introduced on 1st April, 1920, the total revenue of the Central Government (including contributions to the Central Government by Provincial Governments) would have been reduced to 116,76 lakhs, and expenditure to 149,09 lakhs. The share of the principal heads of revenue, customs, taxes on income, sale of opium and 'other heads' under the new classification, in the total revenue would have been 63,36 lakhs. We may bear these figures in mind, for they enable us to understand the diminished revenues and expenditure of the Central Government in 1921-22 and 1921-23 as compared with the corresponding figures for 1920-21 under the old classification.

THE BUDGET FOR 1921-22.

For 1921-22 the Finance Member estimated the revenue at Rs. 110½ crores, including the Provincial contribution of 98.3 lakhs, and expenditure at 129 crores. There was thus a deficit of 18½ crores, and additional revenue was required to meet it.

The new taxes took the form of an increase in the general tariff rate, increase in the surcharge on railway goods traffic, higher postal rates and increase in the Income Tax and the Super tax. The general *ad valorem* duty on imports was raised from 7½ to 11 per cent., except in the case of matches and certain articles

of luxury, which were taxed at a higher rate. There was no increase in the cotton excise, which remained at 3¹ per cent. The higher duty on matches worked out to one pie per box. The higher duty on the imports of articles of luxury, such as motor cars, motor cycles, silk, piece goods, fire works, etc., was increased from 7¹₂ to 20 per cent. The duty on sugar was raised from 10 to 15 per cent and that on manufactured tobacco, from Re 1 1/2 per lb to Re 2 4 and on imported cigars and cigarettes from 50 per cent to 75 per cent. The duties on imported wines and liquors were also substantially increased. As regards the increase in postal rates the most important of the Finance Member's proposals that is, raising to half anna the 1/2 anna post card and the doubling of the minimum charge for letters were not accepted, but, as a compromise the rate of nine pice for letters exceeding half a tola in weight was adopted. The changes in the Income Tax did not affect the lower grades of the tax but the upper grades were increased so as to work up to a maximum of 10 pies instead of 12 pies in the rupee.

The Budget estimates as finally passed provided for a revenue (including new taxation) of 128¹ crores against an expenditure of 127¹ crores, leaving a small surplus of 71 lakh².

Capital expenditure in 1920-21 amounted to Re 37 4 crores (inclusive of excharge) of which railways claimed 25 3 crores. For 1921-22 the Finance Member made a provision for a Railway

capital programme of Rs 15 crores. His borrowing programme consisted of a rupee loan of 15 crores in India and a sterling loan of £ 5,000,000 in England. He made no specific provision for the reduction of the floating debt or the deflation of the currency, but in case the rupee loan brought in more than 15 crores, he proposed to devote the excess to that purpose.

Revised Estimate for 1921-22

As we have seen, the Budget for 1921-22 anticipated a surplus of Rs 71 lakhs, but on 1st March, 1922, the Finance Member announced a deficit of no less than Rs 34 crores. The revenue was 108 crores, or 20½ crores less than the figure taken in the Budget and the expenditure 141½ crores, or 14½ crores more than the amount budgeted for.

The decline in revenue was due to unfavourable economic conditions. It has been pointed out above that a trade depression followed the boom of 1919. The effects of the depression continued to be felt during 1921-22, in spite of the unusually favourable monsoon of 1921. In part the economic depression was the result of world wide causes. Owing to the disturbed state of Europe, demand for our exports was small, and the heavy fall in the value of the mark toward the end of the year 1921 checked our reviving trade with Germany. For the ten months ending January 1922, the balance of trade against India was Rs. 33 crores. Again, high food prices, labour troubles at collieries, inability of importers to take delivery of goods on account of

the fall in exchange, were among the factors which reduced the volume of trade. The result was a falling off in the receipts under important heads of revenue, as shown by the following figures—

	Decrease as compared with Budget estimate.
Customs	4½ crores
Income Tax	90 lakhs
Salt	60 "
Opium	20 "
Railways	13 crores.
Posts and Telegraphs	1½ "

The heavy decline under Railways was partly due to the decrease in gross receipts, but chiefly to the increase in the working expenses. Owing to the shortage in production, high prices had to be paid for Indian coal, and heavy purchases had to be made in foreign countries.

The position as regards expenditure is shown below—

	Increase as compared with Budget estimate.
Interest charges	2 crores.
Military expenditure	3½ "
Loss by exchange	5½ "
Increase in civil expendi- ture	3½ "
<hr/>	
Total	14½ crores

The increase in interest charges was due to the increased sterling borrowing and the larger proceeds of the rupee loan issued in 1921. The

increase under Military charges was due to the operations in Waziristan which cost 6½ crores against an anticipated expenditure of 3 crores. The loss by exchange was caused by the fall in exchange to 1s 4d, while the rate assumed in the Budget was 1s 8d.

The Finance Member in concluding the review of the year 1921-22 said —

Altogether then our expenditure is somewhat over 14½ crores more than we expected; and the total deficit will amount to no less than 34 crores. If you carry your minds back to the history of the last three years the House will realise that this is now the fourth deficit in succession. In 1918-19 it amounted to 6 crores, in 1919-20, mainly due to the Afghan war, the deficit was 24 crores. Our final accounts of 1920-21 swollen by many adjustments of arrear expenditure on the Afghan war and the Great War showed a deficit of 20 crores. Adding the 34 crores to which I have just referred the total excess of expenditure over revenue in the four years comes to 90 crores.'

BUDGET FOR 1922-23

In framing the estimates of revenue and expenditure for 1922-23 the Finance Member assumed that the year will be a period of reviving trade. There are already some signs of the revival. Though the stocks of Indian goods in foreign countries are still large the demand for our exports is increasing, which is shown by the fact that the total exports from India in December 1921, were greater than those of any month

since September 1920. The Finance Member expected an increase in the imports of piece goods in 1922-23 and in the exports of jute, and he estimated the Customs to be 36 42 crores, or nearly 9 crores in excess of the Customs revenue in 1921-22. Under Income Tax a loss of 1 crore as compared with the receipts in 1921-22 was anticipated. Salt was taken at 7 crores, practically the same as the receipts under this head in 1921-22. Under Railways net receipts of 24½ crores were expected, but interest and other indirect charges were estimated at 30 crores, so that the railways would be working at a loss of more than a crore. A 25 per cent increase in passenger fares which the Finance Member proposed and which was accepted by the Legislative Assembly will however, cover the loss and leave some margin for replacements and renewals. Under Posts and Telegraphs a loss of about 80 lakhs was expected. On the whole, the total revenue for 1922-23 (including the increase in passenger rates and Provincial contributions of Rs 920 lakhs) was estimated to be 116½ crores, and without the proposed increase in passenger fares, 110½ crores. The estimated expenditure, however, was 142½ crores, of which 63½ crores, or about 43 per cent represented military expenditure. The deficit therefore, amounted to 31½ crores, if passenger fares were not increased, and if they were increased to 25½ crores.

How to Meet the Deficit

The deficit was a big one, and the problem of meeting it was very serious. There were three possible solutions (1) budgeting for a deficit, or

leaving the deficit uncovered (2) reducing expenditure and (3) increasing the revenue

As regards the first it may be said that the financial history of India furnishes no instance of Government budgeting for a deficit excepting, of course the first war Budget of Sir William Meyer. But as we have seen Sir William Meyer thought that the war was going to end before the close of the financial year 1915-16, and that the deficiency in revenue was not of an abiding character and when it became evident that such was not the case he did not hesitate to increase taxation. The present emergency is not similar to that which confronted the Finance Member in 1915-16. 'I do not think' said Sir William Hailey in introducing the Financial Statement for 1922-23, 'that it is possible to take the position that these deficits are due to transient causes, that we can look for better times ahead and that we should consequently be justified in leaving things as they are in the hope that before long our revenues will once more have equalled our expenditure. I must say frankly that I see very little prospect of such equilibrium being attained within a measurable period.'

He also pointed out that a succession of deficits was dangerous as it increased the floating debt of the Government. The total deficit of 90 crores during the four years ending 1921-22 has been largely met by the issue of fiduciary currency notes (37 crores) backed by the I.O.U.s of the Government, and of Treasury bills, mostly of 3, 6, or 9 months (47 crores). The present

stagnation in trade has enabled Government to increase their short term liabilities but the revival of trade would have the most serious consequences, as the demand for repayments of treasury bills might easily exceed fresh sales.

As regards reducing expenditure, the Finance Member assured the House that all new expenditure in connection with the Civil Departments, which could not be proved to be of imperative necessity, had been cut down. Government had also agreed to the appointment of a Committee of Retrenchment but any retrenchment which it might suggest would only have a minor effect in restoring the balance between income and expenditure during 1922-23. As for military expenditure, the Commander in Chief insisted that, in view of the existing political situation, no further reduction in the strength of the army was possible, and the Military estimates could not be cut down. 'I submit therefore', said the Finance Member, 'that there is no escape from the conclusion that it is imperative to take every possible step to increase our revenues.'

The Proposed Increase in Taxation

Increased revenue can be obtained from commercial sources and by taxation. The Finance Member proposed to increase railway passenger fares by 2½ per cent and to double the post card rate and the minimum charge for inland letters, which would mean the abolition of the one post card and the 1 anna and 9 pice rates for letters. The proposals for additional taxation were —

1. Increase in the general tariff from 11 per cent, to 15 per cent, and of the excise on

cotton goods from 3½ to 7½ per cent.

2. The duty on machinery, iron and steel and railway material to be raised from 2½ to 10½ per cent.

3. The duty on sugar to be increased from 15 to 25 per cent.

4. The specific duty of 12 annas per gross boxes of matches to be raised to Re. 1 8

5. An excise duty of 1 anna per gallon on kerosine produced in India and a corresponding increase in the duty on imported petroleum

6. A duty on imported yarn of 5 per cent

7. The duty on the imports of articles of luxury to be raised from 20 to 30 per cent

8. Increase in the duty on imported alcoholic liquors.

9. The tax on incomes between Rs 20,000 and 40,000 to be raised from 11 pies to 15 pies, and on incomes above Rs 40,000 from 16 pies to 18 pies. The higher rates of Super tax to be graduated so as to work up to the highest rate of 6 annas as against the existing highest rate of 4 annas.

10. The Salt duty to be raised from Re. 1 4 to Rs. 2 8 per maund, the increase representing 3as. per head per annum.

The Finance Member estimated that the total extra revenue obtainable from these measures would be Rs. 29 crores in 1922-23. There was thus a deficit of Rs. 2½ crores which he proposed to leave uncovered.

The Budget gave rise to much discussion in the Legislative Assembly and in the press. Government's military expenditure formed the centre

of attack. A reduction of the pay of the officers of the Army Department was moved by way of a vote of censure in the Legislative Assembly and was carried by a majority of 60 votes against 28. The majority included almost all non-officials, Indian as well as European. The demands under various administrative departments were reduced by 5 per cent. As regards new taxation, of the total of 29 crores asked by the Finance Member, the Assembly refused 9 $\frac{1}{2}$ crores. The increase in taxation under the following heads was rejected:—

Lakhs of rupees

Salt duty	130
Cotton excise	100
Import duty on cotton goods	140
Import duty on machinery	185
	—
	955

The Assembly, however, accepted Sir Montagu Webb's proposal to transfer 339 lakhs of interest on the paper currency securities to the revenue account. As result of these changes the total uncovered deficit in 1922-23 amounts to over 9 crores.

The Assembly has been much blamed for refusing 9 $\frac{1}{2}$ crores of additional taxation needed to balance the budget. The critics point out that India is probably the most lightly taxed country in the world, taxation in India in 1920 being 7s. 7d. per head as compared with £ 22 in United Kingdom; and that in India taxation is only 50 per cent. above the pre-war standard as compared with 400 per cent. in United Kingdom. In defence of the military expenditure it is urged that, though it is a little more than half the Indian revenue,

it is only 26 per cent of the revenue if the income from excise, irrigation, stamps forests and the land revenue all assigned to the provinces, is included. It is also pointed out that military expenditure (£ 40 000,000) comes to 2s 6d per head as compared with £ 150 000,000 or £ 3 10s per head in Great Britain. The point however, which is ignored by the critics of Indian finance is that India is a poor country and that perhaps the 50 per cent increase in taxation as compared with the pre-war standard bears more heavily on the average Indian tax payer than the 400 per cent increase on the British tax-payer. Further almost every one in India is agreed that there is a great and urgent need for economy in civil as well as military expenditure. The refusal of 9¹ crores of new taxes by the Legislative Assembly serves to call attention to this very important fact. The anxiety of Government to reduce expenditure is shown by the appointment of the Retrenchment Committee under the chairmanship of Lord Inchcape.

The need however for increasing revenue is as great as that for reducing expenditure. We cannot go on year after year with uncovered deficits and large floating debts. In view of the general depreciation of money and the increase in expenditure which it necessarily involves, a return to pre-war standards of expenditure or taxation is unthinkable. The yield of old taxes must be increased and fresh sources of revenue must be found so far as that is possible without laying heavier burdens upon the poorer classes of the community than they can be equitably

called upon to bear, if equilibrium is to be restored between national income and expenditure

The case for protection of Indian industries has been argued in a subsequent chapter. It may be here stated that a tariff is a source of revenue which cannot be despised and that for a country like India it is a more suitable form of taxation than direct taxation. The Customs revenue is already the most important source of Indian revenue, and it can be further increased. A tariff would not only yield more revenue but in view of the protectionist sentiments of the people it would cause less popular discontent than any considerable enhancement of the Income Tax. As for the free traders contention that a tariff which protects cannot yield revenue and one which yields revenue cannot protect, it is sufficient to say that protective duties need not be prohibitive. There are many instances in history of tariffs which have protected and also yielded revenue. For example under the German tariff of 1878, the receipts from Customs increased from 103 million marks in 1878 to 397 millions marks in 1890 and at the same time this tariff enabled German manufacturers to secure for themselves their home market.*

An important class of the community which is able to contribute more towards the expenses of Government is that of big landlords. In proposing new taxes in March 1922 the Finance Member said "The burden which the community is now invited to shoulder is a heavy one,

* Schmoller's *Grundriss der allgemeinen Volkswirtschaftslehre* 1900 Vol 2nd p 728

we have done our best to distribute it as equitably as possible and to see that all classes of the community shall contribute, each according to its capacity." But in spite of the fact that important additions have been made during the last seven years to the duties on the imports of articles of luxury and to the Income Tax, it cannot be said that at the present time all classes of the community contribute towards the expenses of Government, each according to its capacity. Take big landlords for example. It is true that landlords pay the land revenue, and that with the increase in their income, Government's share of the net profits of cultivation has increased. But the contribution made by the landlords to the State has not increased in the same proportion as their capacity. An illustration will make this clear. If my annual income is Rs. 5,000 and is derived from a non agricultural source, it is assessed for the purposes of the Income Tax at the rate of six pices in the rupee, or I pay 156 rupees. When my income increases to Rs. 25,000 I am required to pay, not five times 156 rupees, =780 rupees, but exactly double, 1,560 rupees. Now if the rise in the prices of agricultural produce and the price of land during the last 30 years is any measure of the growth in the income of large landholders, it may be assumed that their incomes have increased three to four times. But the land revenue which they pay to the State is the same 50 per cent. of the *net assets* (much less than one-fifth of the gross produce of the land) as long ago, while in those parts of the country which are under permanent settlement, as is well known, the amount of their contribu-

tion was fixed about 150 years ago. It will not be denied by any one that large landholders, whether under permanent or temporary settlement, are not crushed under the weight of the land revenue and that they are perfectly able to bear increased tax burdens. While the poor consumer has had to pay constantly rising prices for his food large landholders have made money, and during the last six or seven years particularly they have grown enormously rich. It is iniquitous that while the poor consumer is asked to pay more for his salt matches railway fare and post card the rich landlord should also not be required to pay more according to his increased capacity. It is of course not suggested that his land revenue should be increased that would not help the Central Government. But I suggest that the Central Government should levy a special tax on agricultural incomes in all parts of India, whether under temporary or permanent settlement above say, Rs 1000 (allowance being made in each case for land revenue paid) according to a graduated scale working up to a maximum of, say one anna in the rupee. To give effect to the proposal it would be necessary to amend the Income Tax Act of 1888.

I am unable to say what the yield of this tax will be as statistical data regarding the number of landlords who enjoy incomes of more than Rs 2000 annually over and above the land revenue paid by them are not available to me. But it may be said that the yield of such a tax, particularly in the tracts under permanent settlement will be large. It is sometimes argued that

though Bengal pays less land revenue, it pays a large Income tax, from which it is inferred that Bengali landlords have invested their income in industries. But in 1918-19 Bombay's contribution to the Income Tax was 389 lakhs as compared with Bengal's 350 lakhs, while Bombay paid 428 lakhs as land revenue against Bengal's 305 lakhs. It may be estimated that the proposed tax will yield several crores of rupees and probably make it unnecessary to increase the salt duty or to tax cloth made in the country.

Large agricultural incomes are a subject peculiarly suitable for taxation for two reasons (1) they are an unearned increment and (2) they are made at the expense of other sections of the community.

The increase in the income of large landholders is chiefly due to the rise of prices. If the rise in the prices of agricultural produce, caused by the increase of internal demand or exports to foreign countries doubles my income from land I cannot in any sense be said to have earned the increase. The big landlord does no work. In most cases he lives in big towns and squanders away the wealth which hard working and long suffering labourers produce for him on his pleasures. The wage earner earns his wages by the sweat of his brow. The income of the landlord is solely due to the fact that he has monopolised some part of the most important agent of production, land.

Secondly, the gains of the big landlord are made at the expense of the agricultural labourer and the consumer. It is well known that

agricultural wages have not risen over a large part of the country in the same proportion as the rise in general prices. The agricultural labourer is regularly exploited by the big landlord, if exploitation has any meaning. Again the rise in the prices of food stuffs has inflicted great hardships on the consumer, but the higher the prices the greater is the gain of large landholders. Small farmers gain very little by the rise of prices, but the proposed tax will not affect them.

— —

Borrowing Powers of Local Governments

Local Governments have been empowered to raise loans, with the previous sanction of the Governor General in Council on the security of their revenues for any of the following purposes —

- (a) to meet capital expenditure on the construction or acquisition of any work in connection with—
 - (1) the improvement of irrigation or communications or the supply of electric power for industrial purposes or
 - (2) any building or housing scheme or
 - (3) any scheme for the drainage or reclamation of land or
 - (4) any scheme for the development of forests and forest industries or
 - (5) any other project of like nature,
- (b) for the giving of relief and the establishment and maintenance of relief works in times of famine or scarcity,
- (c) for the financing of the Provincial Loan Account and
- (d) for the repayment or consolidation of loans raised in accordance with these rules or the repayment of advances made by the Governor General in Council

Taxing Powers of Local Governments.

A Provincial Legislative Council can, under the Government of India Act, without the previous sanction of the Governor General, impose the taxes included in Schedules I and II below:—

SCHEDULE I—

1. A tax on land put to uses other than agricultural.
2. A tax on succession or on acquisition by survivorship in a joint family.
3. A tax on any form of betting or gambling permitted by law.
4. A tax on advertisements.
5. A tax on any specified luxury.
6. A tax on amusements.
7. A registration fee.
8. A stamp duty other than the duties of which the amount is fixed by Indian legislation.

SCHEDULE II

In this Schedule the word "tax" includes a cess, rate, duty or fee.

1. A toll.
2. A tax on land or land values.
3. A tax on buildings.
4. A tax on vehicles or boats.
5. A tax on animals.
6. A tax on menials or domestic servants.
7. An octroi.

8. A terminal tax on goods imported into a local area in which an octroi was levied on or before the 6th July 1917.

8. A tax on trades, professions and callings.

9. A tax on private markets.

10. A tax imposed in return for services rendered, such as—

- (a) a water rate,
- (b) a lighting rate,
- (c) a scavenging, sanitary or sewage rate,
- (d) a drainage tax.
- (e) fees for the use of markets and other public conveniences.

*General Account of the Revenue and Expenditure
of India in India*

REVENUE

Principal Heads of Revenue	1913-14 £1 000	1914-15 £1 000	1915-16 £1 000
Land Revenue	21 391	21 221	22 031
Opium	1 624	1 512	1 913
Salt	3 445	3 900	3 647
Stamps	5 318	5 082	5 433
Excise	8 894	8 856	8 632
Customs	7 558	6 37	5 873
Income Tax	1 950	036	2 190
Other heads	5 545	3 114	3 244
Total Principal Heads	53 728	51 141	52 966
Interest	1 352	1 023	1 096
Post and Telegraphs	3 598	3 596	3 787
Mint	339	69	101
Receipts by Civil Depts	1 408	1 505	1 579
Miscellaneous	772	677	679
Railways Net Receipts	17 625	15 799	17 977
Irrigation	4 713	4 680	4 779
Other Public Works	298	288	304
Military Receipts	1 369	1 374	1 241
Total Revenue	85 207	81 157	84 413
Deficit		1,785	1 188
Total	85 207	82 942	85 602

*ture charged against Revenue of the Government
and in England*

XIV

1916 17 £1,000	1917 18 £1 000	1918 19 £1 000	1919 20 £1 000	1920 21 £1 000
22 041	21 607	21 089	22 609	21 316
3 160	3 08	3 289	3 037	2 356
4 826	5 499	4 277	3 852	4 509
6 776	5 777	6 018	7 274	7 304
9 215	10 161	11 557	12 839	13 624
8 659	1 036	12 120	14 988	21 265
3 74	6 308	7 758	15 472	14 795
3 655	3 885	4 316	4 959	4 006
61 107	67 304	70 428	85 014	90 179
1 136	2 170	3 829	3 372	2 384
4 174	4 616	5 342	6 136	6 413
689	517	1 826	1 786	490
1 759	1 935	2 094	2 263	2 370
847	4 868	6 728	1 805	8 234
21 313	14 141	24 962	21 224	16 676
5 155	5 063	5 346	5 833	3 864
309	323	347	370	508
1 572	1 720	2 349	2 603	4 319
98 050	112 662	123 257	13 407	137 438
		3 820	15 768	17 339
98 050	112 662	127 078	146 176	154 777

EXPEN-

	1913 14 £1 000	1914 15 £1 000	1915 16 £1 000
Direct Demands on the Revenue	9 274	8,939	9 467
Interest	1,515	1 191	1 190
Posts and Telegraphs	3 272	3 277	3 149
Mint	332	141	89
Salaries and Expenses of Civil Dep'ts	17 934	18,909	18 868
Miscellaneous Civil Charges	5 403	5 311	5 128
Finance Relief and Insurance	1 000	1,000	1 000
Railways Interest and Miscellaneous Charges	12 836	13 641	13 901
Irrigation	3 531	3 754	3 721
Other Public Works	7 610	7,177	5 451
Military Services	21 265	21 809	23 503
Exchange Adjustment (a)			
Total	83 177	85 133	85 471
(a) Add—Provincial Surpluses	323		335
(b) Deduct—Provincial Deficits	608	2 190	207
Total Expenditure charged against Revenue Surplus	82 894	82 942	83 602
Total	85 207	82 942	83 602

(a) That is portion of allotments to Provincial Governments

(b) That is portion of Provincial Expenditure defrayed

(c) That is adjustment on account of the difference in

DITURE.

1916-17 £1,000	1917-18 £1,000	1918-19. £1,000	1919-20 £1,000	1920-21 £1,000
9,328	9,854	11,787	12,192	14,847
1,174	7,328	8,127	7,677	8,505
3,441	1,567	3,974	4,64	6,957
167	167	305	324	170
19,081	21,855	23,688	25,560	29,934
5,414	5,918	6,292	5,554	8,499
1,000	1,000	1,000	1,138	1,000
13,831	14,227	14,394	11,954	12,917
3,549	3,784	3,946	4,232	4,678
4,618	5,048	5,651	7,091	8,518
26,66	30,763	46,830	58,169	58,821
7,263				.
88,174	102,516	125,599	145,721	154,184
2,397	2,256	1,143	738	5,109
.	197	67	283	4,515
90,572	104,775	127,078	146,176	154,777
7,478	8,087			
98,050	112,662	127,078	146,176	154,777

not spent by them in the year

from Provincial Balances.

exchange due to the adoption of the 2s. basis for conversion

*General Statement of Revenue and Expenditure
charged to Revenue of the Central Government, in
India and England*

REVENUE.

Principal Heads of Revenue		Revised Estimate, 1921-22 Lakhs of rupees	Budget Estimate, 1922-23. Lakhs of rupees
Customs		34,35	51,32
Taxes on Income		17,09	22,11
Salt		6,41	11,36
Opium		3,03	3,09
Other Heads		2,20	2,35
Total Principal Heads		63,69	90,25
Railways: Net Receipts		16,38	30,85
Irrigation: Net Receipts		7	7
Post and Telegraphs: Net Receipts		37	1,65
Interest Receipts		1,04	84
Civil Administration		72	86
Currency, Mint and Exchange		16	21
Civil Works		11	10
Miscellaneous		6,85	66
Military Receipts		6,53	4,84
Contributions and Assignments to Central Government by Provincial Governments		12,99	9,20
Total Revenue		1,08,96	139,58
Deficit		33,01	2,71
Total		1,41,98	1,42,30

EXPENDITURE.

	Revised Estimate, 1921-22. Lakhs of rupees	Budget Estimate, 1922-23. Lakhs of rupees
Direct Demands on the Revenue	50.6	5,69
Railways Interest and Miscellaneous Charges	24,40	25,98
Irrigation	13	11
Posts and Telegraphs	1,37	97
Debt Services	13,77	15,20
Civil Administration	8,95	10,01
Currency, Mint and Exchange	9,92	10,53
Civil Works	1,52	1,69
Miscellaneous	4,50	4,13
Military Services	71,55	67,02
Miscellaneous adjustments between the Central and Provincial Governments	76	63
Total Expenditure charged to Revenue	1,41,98	1,42,30
Surplus		-
Total	1,41,98	1,42,30

Indian Banking since the War.

The history of Indian banking during the war is a record of progress and prosperity. This is shown by increase in the capital and reserve, deposits and cash holdings of the banks.

Exchange Banks.—The paid-up capital and reserve of the Exchange banks on 31st December 1919, amounted to £ 53 millions as compared with about £ 38 millions on 31st December 1913, their deposits held in India increased during the same period from £ 31 millions to £ 74 millions, and cash balances in India from about £ 6 millions to about £ 30 millions. The Exchange banks may be divided into two classes, (1) banks doing a considerable portion of their business in India, and (2) banks which are merely agencies of large banking corporations doing business all over Asia. The following table shows the capital, reserve, deposits and cash balances of the two classes of Exchange banks on 31st December 1919.

[Table

	1. Banks doing a considerable portion of their business in India	2. Banks which are merely agencies of large banking corporations doing business all over Asia	Total
Number of Banks	5	6	11
Paid-up Capital £1,000	5,665	26,266	31,932
Reserve and Rest £1,000	6,724	14,415	21,139
Deposits out of India £1,000	81,690	351,311	433,001
Deposits in India <i>Lakhs of Rs</i>	61,07	13,28	74,35
Cash Balances out of India £1,000	18,988	44,583	63,571
Cash balances in India <i>Lakhs of Rs</i>	21,03	8,94	29,98

The profits made by four leading Exchange banks in 1919 and 1920 are shown by the following table —

[Table.

1919.

	Net profit	To reserve.	Dividend rate.
£	£	£	%
Eastern Bank	102,645	40,000	8 $\frac{1}{2}$
Mercantile Bank	215,636	85,000	16
National Bank	452,169	190,000	20
Chartered Bank	447,348	20,000	20 $\frac{1}{2}$

1920.

	Net profit	To reserve	Dividend rate
£	£	£	%
Eastern Bank	121,363	40,304	8
Mercantile Bank	260,208	75,000	16
National Bank	553,398	240,000	20
Chartered Bank	676,771	235,000	20 $\frac{1}{2}$

Indian Joint-Stock banks.

It was fortunate for the country that the crisis in Indian banking occurred before the war. That the crisis was very severe and widespread is shown by the fact that in 1913 and 1914 no less than 63 banks failed in different parts of the country. The number of bank failures in 1914 was 43, of which 25 occurred between January and July 1914, i.e., before the outbreak of the war. Bank failures continued during the war, 11 in 1915, 13 in 1916, 16 in 1918, and 4 in 1919, but it may be said that the worst of the crisis was over before the outbreak of the war. The crisis eliminate the weaker joint-stock banks and those which survived the crisis have profited by the lessons which it has taught. The joint-stock banks, are in a much stronger position now than they were ever before. The proportion of cash to liabilities on deposits in the case of the larger banks on 31st December 1919, was 21 per cent. as compared with 11 per cent. in 1910 and 15 per cent. in 1912. The following figures give a general idea of the position of the joint-stock banks in 1919:

[Table

Banks with Capital and Reserve of Rs. 5 lakhs and over

Year	Number of report- ing banks.	Paid-up capital.	Reserve and reserve.	Total.
				Rs 1,000
1913	18	2,31,33	1,32,94	3,64,27
1910	18	5,39,07	2,24,27	7,63,34

Year	Deposits	Cash Balances.
		Rs 1,000
1913	22,59,19	4,00,17
1919	58,99,47	12,16,63

Banks with Capital and Reserve between Re. 1 lakh and less than Rs. 5 lakhs.

Year.	Number of reporting banks.	Paid up capital.	Reserve and reserve.	Total.
1913	23	Rs. 1,000 39,14	Rs. 1,000 11,85	Rs. 1,000 50,49
1919	29	53,94	21,10	75,04

Year.	Deposits.	Cash Balances.
1913	Rs. 1,000 1,51,15	Rs. 1,000 24,95
1919	... 2,28,49	53,70

It will be seen that the capital and reserve of the larger banks more than doubled, the cash balances increased more than three times, and the deposits, more than 2½ times.

The Presidency Banks (now amalgamated into the Imperial Bank of India)

Between 1913 and 1919 private deposits of the three Presidency banks increased from 36½ crores to 68 crores and total deposits, including public deposits, from 42½ to 76 crores. Their cash balances in the same period increased from about 15½ crores to a little above 23½ crores.

The general increase in the deposits of all banks seems to be partly due to the loans made by the banks to their customers for the purchase of Government securities. It is well known that the loans of one bank make the deposits of another. The Indian banks, particularly the Presidency and the Exchange banks, rendered valuable help to the Government in raising money for the various war loans. In addition, the increase in the investments of the banks shows that they were themselves large purchasers of Government securities.

Investments, Government and other securities.

		1913 Lakhs of Rs.	1919 Lakhs of Rs.
Bank of Bengal		3,10	8,64
Bank of Bombay	..	2,29	3,16
Bank of Madras	...	1,18	1,75
Total	...	6,57	18,55
		£ 1,000	£ 1000
Chartered Bank		4,243	6,436
Mercantile Bank	.	478	1,633
National Bank		1,080	8,489
Eastern Bank	.	226	1,823

The investments of 12 Indian Joint-Stock banks increased from Rs. 3 crores in 1913 to about 5 crores in 1917.

The preceding review of the progress of Indian banks during the war shows that Indian banking is developing along sound lines. The steady growth of deposits shows that the confidence of the public in the banks has increased. In 1887 the total deposits of all Indian banks amounted to only 17½ crores, as compared with 211 crores in 1919. The number of banks and their branches has also increased. There were in 1919, 96 head offices of banks with 322 branches. But consider-

ing the great size of the country and its huge population, it cannot be said that the provision of banking facilities is adequate. In 1919 the proportion of towns with a population of 10,000 or over in which banks and their branches were situated was only 25 per cent. and in 21 per cent. of the 75 towns possessing a population of over 50,000 there were no banks at all.

As compared with our 96 head offices and 322 branches in 1919, there were in England in 1916, 35 banks with 5,993 branches. The number of banks in England has been reduced by amalgamations. But while the number of banks has decreased, banking facilities have increased. In 1686 there were working in England 109 banks with 1,547 branches, 30 years latter the number of banks was reduced to one third, but the number of branches increased about four times.

The English banks are giant institutions with which it would be too ridiculous to compare any Indian bank. On 30th June 1921, deposits of the London Joint City and Midland Bank amounted to £ 371,000,000, the total deposits of all Indian banks (Presidency, Exchange and Joint-Stock) on 31st December 1919, did not exceed Rs. 211 crores or £211,000,000 (£1=Rs. 10)—that is, the deposits of one English bank were much greater than the deposits of all the Indian banks put together. How very rapidly deposits grew in the United Kingdom during the war is shown by the fact that while between 1913 and 1916 Indian deposits increased from £ 65,000,000 to £75,000,000 or 17 per cent., in the United

Kingdom deposits in the same period increased from £ 1,142,000,000 to £ 1,658,000,000 or 45 per cent.

The consolidation of banking by the fusion of banks into huge corporations may be described as the chief feature of English banking development during the war. The amalgamations began long before the war, but the need for providing credit for reconstruction at the close of the war gave a great impetus to the movement. It is recognised that the great banks that have come into existence as the result of amalgamation have rendered important services to English industry and commerce. But on the other hand, the control of British banking has virtually passed into the hands of the "Big Five" who dominate the London money market, and a state of things in which individual banks are more powerful than the Bank of England, the pinnacle of the whole system, is thought to be not without danger. Some people have imagined that the foundation of these great banks which practically enjoy a monopoly of British banking will prepare the way for the direct government control of banking.

The danger of over centralization is also real. Branch managers under the new system may sink into the position of mere intermediaries between customers and head offices. Such a tendency there must be in every centralized system, and if it grows and develops in banking, it may destroy that personal relation between the banker and his customers which is the foundation of good banking.

India has also been affected to some slight extent by the movement toward amalgamation. The Alliance Bank of Simla established in 1874, has successively absorbed the Punjab Banking Company the Indian branch of the London and Delhi Bank and from the end of 1917, the Bank of Rangoon. The Bank has also taken over a portion of the business of the Bank of Upper India. The most important banking amalgamation, however, was that effected in January 1921—of the three Presidency Banks into the Imperial Bank of India.

Before the war the seasonal fluctuations in the Indian bank rate were remarkable. The average rate of discount during the first half of the year was invariably much higher than that in the second half of the year the difference sometimes amounting to about 100 per cent. Generally the rate reached its highest point in February and its lowest point in August. In the pre-war year 1913 the maximum rate of discount at the Presidency Bank of Bengal in February was 8 per cent and the minimum in August 3 per cent. The seasonal changes in our bank rate which were very great and very regular afforded the most clear ground of differentiation between the Indian market and those with which we are familiar in Europe (Keynes). This ground of differentiation still exists, but it is now less clear than it was before the war as will be seen from the table given below —

*Rates of Discount at the Presidency Banks of
Bengal, Bombay and Madras.*

Year	Bengal		Bombay		Madras	
	Maximum Rate. Feb.	Minimum Rate. Aug.	Maximum Rate. Feb.	Minimum Rate. Aug.	Maximum Rate. Feb.	Minimum Rate. Aug.
1913	8	3	8	3	8	5
1914	7	3	6	3	7	5
1915	6	3	6	5	6	5
1916	8	5 or 6	8	4	8	7
1917	8	6	6	5	8	6
1918	6	5	6	5	7	6
1919	7	5	7	5	8	6
1920	7	5	7	5	8	6
Imperial Bank of India						
1921	6	5				

The war somewhat lengthened the busy season and shortened the slack season. A chief cause of the unusually high bank rate in the busy season was the Independent Treasury System of the Government of India, which has now been done away with. The whole of the Government balances will now be kept with the Imperial Bank of India, and this must tend to lessen the difference between the bank rates in busy and slack seasons.

The Imperial Bank of India.

The question of a State Bank for India has formed the subject of a long controversy. The Government of India recorded their "deliberate opinion" in 1901 that "it would be distinctly advisable, if practicable, to establish a Central Bank in India, so as to relieve Government of its present heavy responsibilities and to secure the advantages arising from the control of the banking of the country by a solid and powerful central institution". The question was considered by the Chamberlain Commission of 1918, but the Commissioners, while regarding the subject "as one which deserves early and careful consideration", did not find themselves in a position to report either for or against the establishment of a State or a Central Bank. Professor J.M. Keynes, a member of the Commission, however, prepared a memorandum on the subject recommending the establishment of a State Bank, which was printed as annexe to the report of the Commission. The question was discussed in the Imperial Legislative Council on September 23rd 1919, the occasion for the discussion being furnished by the following Resolution moved by Rai Bahadur B N Sarma —

"This Council recommends to the Governor-General in Council that a State Bank on the lines suggested by Professor Keynes in the annexure to the report of the Indian Currency Commission be established in India at a very early date."

The mover of the Resolution, it will be noted, recommended the establishment of a State Bank, not a private central bank. He thought that the interests would not receive the same

encouragement under an amalgamated private bank as under a system of State management and control.

The Resolution was rejected by the Council. Government opposed it chiefly on the ground that the proposal was not practicable. In the course of his reply to Mr. Sarma, the Finance Member (Mr. H.F. Howard) said :

"Mr. Keynes' scheme of course presupposes that we should build on our existing Presidency Banks. There are, however, always two parties to such an arrangement. I do not know how the Presidency Banks would like to be taken over, lock, stock and barrel like that. We certainly could not force them into anything of the kind. We could refuse them a renewal of their charter, but it would be quite open to them to carry on as ordinary banks, and if we in those circumstances wished to start a State Bank, we should have to start with nothing to build on at all. That seems to me to be quite out of the question, and the only real practical solution, looking at it as a commercial proposition, seems to me to use the machinery which we have, which is in running order and which commands public confidence. It does not follow, however, that by any initial step we take now we are definitely committed for all eternity to a private bank as compared with a State Bank. My only point is, it is quite clear that however we start, we must, if we wish to get a move on at all, start with some existing institutions, so that we can get on with the minimum of delay. When we have once proceeded so far as an amalgamation and have secured some closer

co-operation with Government than is practicable under present conditions, the new institution, the Imperial Bank of India, can then be allowed to develop in the way in which development seems to be best required; whether in the direction of a State Bank or not I should not like to commit either Government or the Banks or anybody else now; but there is nothing to prevent it from developing as necessary."

Mr. Howard also informed the Council that the Presidency Banks, if amalgamated, would undertake to open within five years 100 branches in different districts of India, and that they would put before themselves the ideal of opening a branch in every district in India. The Bill to constitute an Imperial Bank of India was introduced into the Imperial Legislative Council on 1st March, 1920. The Finance Member, in introducing the Bill, explained that the scheme did not represent an ordinary banking amalgamation. It was proposed to increase the resources of the three banks by handing over the whole of Government balances to them. The amalgamated banks, in return, would be required to further the banking development of the country. The opening of new branches would also afford the means of training Indians as bankers. The new Bank, said Mr. Hailey, would be a national institution.

The Bill received the assent of the Governor-General on September 19, 1920 and the Imperial Bank of India commenced operations on January 27, 1921.

The Imperial Bank of India Act makes a little less rigid some of the restrictions that were imposed upon the former Presidency Banks, but in view of its semi-official character, and in consideration of its acting as bankers to Government, the Bank has undertaken to submit to a certain amount of official control. One section of the Act provides as follows —

(1) It shall be lawful for the Bank under any agreement with the Secretary of State for India in Council (a) to act as banker for, and to pay, receive, collect, and remit money, bullion and securities on behalf of the Government, (b) to undertake and transact any other business which the Government may from time to time entrust to the Bank

(2) Every agreement shall provide: (a) That the Governor-General in Council shall have power to issue instructions to the Bank in respect of any financial policy which, in his opinion, virtually affects his financial policy or the safety of Government balances, and that in the event of the Bank disregarding such instructions, the Governor-General in Council may declare such agreement to be terminated, and (b) that within five years from the commencement of this Act the Bank shall establish and maintain not less than 100 new branches, of which at least one-fourth shall be established at such places as the Governor-General in Council may direct.

A branch of the Bank has been opened in London. Its London Office will enable the Bank to take a more direct interest in the large transactions that have to be arranged between India

and the United Kingdom, and it will give the Bank greater facilities in dealing with any governmental business there with which it may be entrusted and in undertaking any further operations within the provisions of the Act.

The new Bank will not compete with the Exchange Banks in the ordinary exchange business. The Presidency Banks held, in many cases, the balances of the Exchange Banks, and they could not expect to hold these balances if, as the Imperial Bank, they became the rivals of the Exchange Banks in the exchange business. The Bank will, however, undertake exchange business of an official kind, and it will rediscount bills of exchange for the Exchange Banks, thus providing the Exchange Banks with an alternative means of putting themselves in funds in India. Hitherto the Exchange Banks could transfer funds from England to India only by purchasing Council Bills from the Secretary of State in London. The following extract from a speech made in April, 1920, by the Chairman of the Chartered Bank of India, Australia and China will show that the Exchange Banks were not hostile to the amalgamation —

"The proposal for amalgamating the Presidency Banks in India under the title of the Imperial Bank of India is one that has attracted a considerable amount of attention. While regretting the partial disappearance of the individuality of the Presidency Banks, it seems to me that the movement for amalgamation is fully justified and is unlikely to be prejudicial to the interests of Exchange Banks in India;

always provided that the present intention of not competing with the Exchange Banks in their ordinary business of exchange is fully and honourably adhered to. The Presidency Banks have always been the bankers of the Exchange Banks. The utmost good feeling and good will have prevailed, and I should greatly regret to see any interference with the harmonious working between the Presidency and the Exchange Banks. We wish the Imperial Bank a successful career, fully confident that there is ample scope in India both for the semi-State Bank and for the British Banks".

The governing body of the Bank consists of a Central Board of 14 members, of whom 4, namely, the Government Controller of Currency and the Secretaries of the three Local Boards have no vote; the remaining ten are the presidents and vice-presidents of the Local Boards, two managing governors and two non-officials nominated by Government for a year, but who can be renominated.

The Imperial Bank has made a good start. According to its first report, which covers the period of its working to 30th June 1921, 12 new branches had already been established or were about to open. Its capital on 30th June was Rs. 10,65,73,000, of which Rs. 5,47,68,250 had been paid up. The reserves on the same date amounted to Rs. 3,71,21,480 and total deposits to Rs. 92,36,38,952.

Combined Capital and Reserve and Deposits of all Banks in each year from 1910 to 1919.

Year.	Capital and Reserve	Deposits.
	Rs 1,000	Rs 1,000
1910	45,01,64	87,03,03
1911	46,72,63	92,04,30
1912	49,28,53	96,91,08
1913	49,45,33	97,51,04
1914	49,09,89	94,17,48
1915	49,19,95	95,88,06
1916	50,53,38	113,67,61
1917	45,31,81	160,96,76
1918	53,29,60	163,03,19
1919	68,78,19	211,57,47

Capital, Reserve, Deposits and Cash Balances of the Exchange Banks on 31st December each year.

Year.	Bank No.	Capital and Reserve			Deposits		Cash Balances.	
		Paid up Capital Rs.	Reserve and Rest Rs.	Total Rs.	Out of India Rs.	In India Rs.	Out of India Rs.	In India Rs.
1870	3	1,000	1,000	1,000	1,000	1,000	1,000	1,000
		2,004	180	2,184	2,088	2,231	2,611	6,113
1913	12	23,340	14,185	37,825	181,138	310,854	25,686	58,824
1914	11	22,815	14,157	36,972	164,970	301,476	40,694	83,937
1915	11	22,681	14,112	36,793	179,944	335,456	45,111	76,018
1916	10	22,836	15,095	35,931	208,232	360,388	41,867	101,401
1917	9	18,384	14,298	32,982	228,001	533,753	54,765	337,437
1918	10	22,209	17,180	39,449	305,937	618,560	57,981	151,755
1919	11	31,931	21,139	53,970	433,001	743,590	63,571	299,832

*Proportion per cent. of cash to liabilities
on 31st Decem*

	1910.	1911.	1912.
I. Presidency Banks ...	34	35	29
II. Exchange Banks:			
1. Banks doing a considerable portion of their business in India ..	16	16	20
2. Banks which are merely agencies of large banking corporations doing business all over Asia ..	21	16	24
III. Indian Joint-Stock Banks:			
1. Banks having capital and reserve of Rs. 5 lakhs and over ..	11	14	15
2. Banks having capital and reserve between Re. 1 lakh and less than Rs. 5 lakhs ...	...	...	...

*on deposits of the several classes of banks
-ber, each year.*

1913.	1914.	1915.	1916.	1917.	1918	1919.
36	46	34	35	45	29	81
19	28	19	25	40	20	5
17	26	41	85	60	44	67
16	21	22	24	25	23	21
16	22	22	17	21	24	24

*Capital, reserve, deposits and cash balances
of the three Presidency banks on 31st
December each year.*

(Lakhs of rupees)

Year.	Paid up Capital			Reserve and Surplus	Total	Deposits.			Cash Balances.
	Capital	Reserve	Surplus			Public	Private	Total	
1870	3,36	25	3,61	5,43	63 9	11,82		99,6	
1913	3,75	3,73	7,48	5,81	36,48	42,37		15,37	
1914	3,75	3,89	7,64	5,61	40,04	45,65		20,83	
1915	3,75	3,72	7,47	4,88	36,61	43,49		14,65	
1916	3,75	3,60	7,35	5,20	44 70	49,91		17,27	
1917	3,75	3,67	7,42	7 71	67,71	75,43		33,77	
1918	3,75	3,44	7,19	6,64	50,97	59,62		17,07	
1919	3,75	3,57	7,32	7,72	68,21	75,93		23,62	

Capital, reserve, deposits and cash balances of principal Indian Joint-Stock banks on 31st December, each year.

A.—Banks with capital and reserve of Rs. 5 lakhs and over.—

(Lakhs of rupees).

Year.	No. of reporting banks	Paid-up Capital.	Reserve and Rest	Total.	Deposits.	Cash Balances.
1870	2	10	2	12	14	5
1880	3	18	3	21	68	16
1890	5	83	17	51	2,70	55
1900	9	32	45	1,27	8,07	1,19
1910	16	2,75	1,00	3,76	25,65	2,80
1911	18	2,85	1,26	4,12	25,29	3,62
1912	18	2,91	1,34	4,26	27,25	4,00
1913	18	2,31	1,32	3,64	22,59	4,00
1914	17	2,51	1,41	3,93	17,10	3,53
1915	20	2,81	1,56	4,38	17,87	3,99
1916	20	2,87	1,73	4,61	24,71	6,03
1917	18	3,03	1,62	4,66	31,17	7,64
1918	19	4,36	1,65	6,02	40,59	9,48
1919	18	5,39	2,44	7,63	58,99	12,16

B. Banks with capital and reserves between Re. 1 lakh and less than Re. 5 Lakhs.

(In thousands of Rupees)

Year.	No. of reporting banks.	Paid-up Capital.	Reserve and rest.	Total.	Deposits.	Cash Balances.
1913	23	39,14	11,35	50,49	1,51,15	24,95
1914	25	42,22	13,02	55,24	1,26,54	27,99
1915	25	45,88	9,73	55,11	91,37	20,01
1916	28	51,77	11,50	63,23	1,01,23	16,66
1917	25	44,16	10,24	54,40	99,20	20,42
1918	28	48,65	14,43	63,08	1,55,55	36,90
1919	29	53,94	21,10	75,04	2,28,49	53,70

The Development of Indian Industries.

The war forms a landmark in the history of Indian manufacturing industries. It marks the beginning of a new epoch in which India is determined to manufacture for herself most of the articles for the supply of which she has hitherto been dependent upon foreign countries.

The weakness of India's industrial position and her dependence upon foreign countries for the supply of all kinds of manufactured goods is illustrated by the following table showing the value of imports into India and exports from India in the pre-war year 1913-14 according to four main groups :—

[Table

India's Foreign Trade in 1913-14.

	Imports. £	Exports. £
I. Food, Drink and Tobacco ...	16,441,000	43,162,000
II. Raw materials and produce mainly un- manufactured	7,038,000	81,642,000
III. Articles wholly or mainly manufactured	96,770,000	86,894,000
IV. Miscellaneous & unclassified...	1,916,000	1,602,000
 Total ..	122,165,000	162,800,000

Of the total imports in 1913-14, 79 per cent. consisted of articles wholly manufactured, and of the exports about 77 per cent. represented articles included in Groups I and II.

As regards the import trade, it may be said that it is not merely the Indian consumer who is dependent upon foreign manufacturers for the supply of articles of luxury and comfort, but the Indian manufacturer is under the necessity of importing every year machinery and parts of machinery of the value of hundreds of thousands of pounds. The following passage taken from

the report of the Indian Industrial Commission (1916-18),* which deals largely with pre-war conditions, describes the deficiencies in the production of articles :—

" The blanks in our industrial catalogue are of a kind most surprising to one familiar only with European conditions. We have already alluded generally to the basic deficiencies in our iron and steel industries, and have explained how, as a result of these, the many excellent engineering shops in India are mainly devoted to repair work, or to the manufacture, hitherto mainly from imported materials, of comparatively simple structures, such as roofs and bridges, wagons and tanks. India can build a small marine engine and turn out a locomotive, provided certain essential parts are obtained from abroad, but she has not a machine to make nails or screws, nor can she manufacture some of the essential parts of electrical machinery. Electrical plant and equipment are still, therefore, all imported, in spite of the fact that incandescent lamps are used by the million and electric fans by tens of thousands. India relies on foreign supplies for steel springs and iron chains, and for wire ropes, a vital necessity of her mining industry. We have already pointed out the absence of any manufacture of textile machinery, and with a few exceptions, even of textile mill accessories. The same may be said of the equipment of nearly all industrial concerns. The list of deficiencies includes all kinds of machine tools, steam engines

boilers, oil and gas engines, hydraulic presses and heavy cranes. Simple lathes, small sugar mills, small pumps, and a variety of odds and ends are made in some shops, but the basis of their manufacture and the limited scale of production do not enable them to compete with imported goods of similar character to the extent of excluding the latter. Agriculturists' and planters' tools, such as ploughs, *mamooties*, spades, shovels and pickaxes are mainly imported, as well as the hand tools of improved character used in most cottage industries, including wood-working tools, heddles and reeds, shuttles and pickers. Bicycles motor cycles and motor cars cannot at present be made in India, though the imports under these heads were valued at Rs. 187 lakhs in 1913-14. The manufacture of common glass is carried on in various localities, and some works have turned out ordinary domestic utensils and bottles of fair quality, but no attempt has been made to produce plate or sheet glass, while optical glass manufacture has never even been mooted. The extent of our dependence on imported glass is evidenced by the fact that in 1913-14 this was valued at Rs. 164 lakhs. Porcelain insulators, good enough for low tension currents, are manufactured, but India does not produce the higher qualities of either porcelain or china. Attention has been directed to the building of steel ships, but until the local supply of steel has been greatly increased, it is more than doubtful if expectations in this direction can be realised, and it is probable that there are other ways in which our present relatively small

supplies of Indian steel can be more quickly and more profitably utilised."

The industrial backwardness of India has been due to several causes, among which the neglect of applied science, the *laissez faire* policy of the Government in regard to industries and the shyness of Indian capital for modern enterprises may be mentioned. As is well known, one of the most important causes of Germany's industrial leadership is her zeal for scientific studies and the application of science to practical problems. In India, till recently, the study of science occupied a very minor place in the educational system. The education imparted in our schools and universities is still mainly of a literary type, which accounts for the utter lack in India of scientific and business experts who could help in the organisation of industries, and who have, therefore, to be imported. Again, in industrial matters, the Government in the past have, with few exceptions, followed a 'let alone' policy. So far from taking active steps to foster Indian industries, Government have viewed with disfavour any proposal to assist Indian industries even indirectly by means of a protective tariff. "The political and economic conditions of India," wrote the Industrial Commission, "have created a large export and import trade; and this trade has brought about the present industrial position." Unrestricted freedom of importation is responsible in no small measure for the industrial backwardness of India. It largely explains the shyness of Indian capital for modern enterprises. There was never any lack of capital in India,

but Indian capital was chiefly invested in agriculture and a few manufacturing industries as jute and cotton. Profits in most of the industries affected by foreign competition were very uncertain, and Indian capital avoided these industries. Lastly, in the purchase of Government stores very little advantage was taken of the rule intended to encourage the purchase of locally manufactured articles, and Government Departments generally indentured on the India Office for their requirements.

The war forced the Government of India to direct their attention to the question of developing Indian industries. The unprecedented shrinkage of imports made the country realise, as it had never realised before, the terrible consequences of too great dependence upon other countries for the supply of things essential in peace and war. The Industrial Commission emphasized the danger of industrial deficiencies in the following words —

"The list of industries which, though their products are essential alike in peace and war, are lacking in this country, is lengthy and almost ominous. Until they are brought into existence on an adequate scale, Indian capitalists will, in times of peace, be deprived of a number of profitable enterprises, whilst in the event of a war which renders sea transport impossible, India's all important existing industries will be exposed to the risk of stoppage, her consumers to great hardship, and her armed forces to the gravest possible danger."*

* The Report of the Indian Industrial Commission, p. 55.

Every effort was made by the Government during the war to develop Indian industries whose products were required, directly or indirectly, for war purposes. The Indian Munitions Board was established in February 1917. The functions of the Board were "to control and develop Indian resources, with special reference to the needs created by the war, to limit and co-ordinate demands for articles not manufactured or produced in India, and to apply the manufacturing resources of India to war purposes with the special object of reducing demands on shipping." The primary object of the Munitions Board was to meet the demands of the armies operating in Mesopotamia, but it helped very materially in the development of Indian industries by purchasing in India articles and materials needed for the civil and military departments and for the railways, by diverting, so far as it was practicable, orders for articles and materials from the United Kingdom to manufacturers in India, by giving assistance to individuals and firms who desired to import plant or to engage technical and chemical experts and skilled labour from England or elsewhere in order to establish new industries or develop old ones, and by the dissemination of information and expert advice and the giving of other direct or indirect encouragement to persons prepared to establish new industries in India. During the 18 months, from 1st April 1917 to the end of September 1918, the Board spent 34 crores of rupees (£ 22,666,666). The stores were purchased by the Board mainly from Indian firms.

The Munitions Board paid special attention to the encouragement of 'key' industries. For example, some of the accessories used by the milling industries in India, such as roller skins, pickers, sheep skins for rice polishing, belting etc. are now made in India. Other industries to which considerable attention was paid were the manufacture of anti-friction metal, ferro-manganese, glass, pottery, refractory bricks, disinfecting fluids, tea pruning knives, tea chests, asbestos boiler composition, glucose, coir articles and graphite crucibles.

Apart from action taken by the Government to encourage Indian industries, the rise of prices caused by the heavy decline in all kinds of imports gave a great stimulus to Indian manufacturing enterprise. Attempt was made by Indian manufacturers to fill the gap caused by the shrinkage of imports. Old industries were strengthened and enlarged and new industries were established. But for certain causes, arising out of our pre-war industrial weakness, the growth of our industries during the war would have been even more rapid than it was. These causes were : (1) the difficulty of importing machinery and materials such as are not made in India; (2) the shortage of coal and coking plant and the shortage of railway wagons and coasting vessels (3) the difficulty of procuring from abroad chemical and technical experts and (4) the shortage of skilled labour.

PARTICULAR INDUSTRIES

Cotton.

Cotton spinning and weaving have been practised in India for a very long time. More than 2,000 years ago the muslins of Dacca used to be exported to Greece, where they were known as *Gangetika*.* In the 17th and 18th centuries, before the introduction of steam power, Indian cotton goods were in great demand all over Europe. The importation of printed calicoes from India was prohibited in England, in the interests of Manchester, by an Act passed in 1721. Soon after this, however, the application of steam power to industry revolutionised the English cotton industry, and India gradually became an importer of cotton goods. A new chapter in the history of cotton spinning and weaving in India began with the establishment of steam power spinning and weaving factories in India. The first cotton mill was established in 1816 near Calcutta; the first cotton mill in Bombay was established in 1851. Ten years later there were a dozen mills with 33,800 spindles at work in India. The progress of the cotton industry is shown by the following table.

* Imperial Gazetteer of India Vol III p 195

	No. of mills in existence.	Capital. £	Persons employed.	Looms.	Spindles.
1870-1880	58	80,000	39,557	13,307	1,470,830
1889-1890	115	568,216	111,998	23,845	3,197,740
1899-1900	190	469,029	163,296	38,520	4,787,874
1913-1914	264	636,274	260,647	96,688	6,620,576

The total quantity of piece goods produced in Indian mills in 1913-14 amounted to 1,164,291,000 yards, the imports in the same year were 3,197,128,000 yards, or more than 2½ times the Indian production. The broad facts regarding home production and imports since the year are given in the following table —

[Table

	1914-15	1915-16	1916-17	1917-18.	1918-19.	1919-20.	1920-21
Piece goods in crores of yards—							
1 Total imports	2,42	2,12	1,89	1,52	1,10	1,06	1,49
2 Mill production	1,13	1,44	1,58	1,61	1,45	1,64	1,58
Yarn in crores of pounds—							
3 Imports	4.9	4.04	2.95	1.94	3.81	9.51	4.73
4 Mill production	65.20	72.20	68.10	66.10	61.50	63.60	66.00
5 Exports + re-exports	15.42	16.08	17.05	12.24	6.55	13.39	8.28
6 Indian consumption,	56.1	60.1	54.0	55.8	58.8	49.7	62.4
7 Mill consumption a* suming 1 yard = 21 lb. yarn	23.7	30.0	33.0	34.0	30.5	34.4	33.0
8 Hand loom consumption	32.4	30.1	21.0	21.8	28.3	15.2	29.4

The above figures are taken from a table prepared by Mr. A. C. Coubrrough.* Mr. Coubrrough estimates handloom production on the basis of figures of consumption of yarn by the handloomis. By deducting from the total of imports and mill production of yarn, exports and re-exports of yarn, the total consumption of yarn in India is obtained. The mill production of piece goods is known—it was, for example, 158 crores of yards in 1920-21. Assuming that 21 lb. of yarn was used up in making a yard of woven goods, the Indian mill consumption of yarn in 1920-21 amounted to 33 crore pounds, which leaves 29.4 crores for the handloom industry. Assuming 1 lb. yarn = 4 yards of cloth, the production of hand-woven goods in 1920-21 and the preceding years would be as follows:—

Production of hand-woven goods in crores of yards.

1914-15	...	1,30	1918-19	...	1,13
1915-16	.	1,20	1919-20	...	61
1916-17	.	84	1920-21	...	1,18
1917-18	..	87			

Figures relating to hand-spun yarn are not available, but hand-spun yarn as compared with the mill production is inconsiderable.

The Indian mills were much hampered during the war by the difficulty of importing machinery. This explains why the rate of increase in production was more rapid during the earlier than in the later years of the war.

* Notes on Indian piece goods trade, by A. C. Coubrrough, (Bulletin of Indian Industries and Labour No. 16).

The following table shows by counts the imports and also the Indian mill production of yarn :—

*Imports into British India and Production
in the Indian Mills of Cotton Twist
and Yarn during 1920-21.*

(In thousands)

Counts	Imports from Foreign Countries.				Production in Indian Mills
	U.K.	Japan.	Other countries	Total.	
	lbs.	lbs.	lbs.	lbs.	lbs.
Nos. 1-20	391	4,511	2,689	7,591	443,471
„ 21-30	2,053	1,944	193	4,190	199,086
„ 31-40	12,626	9,346	860	22,842	15,024
Above					
No. 40	3,590	1,406	24	5,020	2,067
Others	4,726	2,916	49	7,691	
Waste					355
Total	23,396	20,123	3,815	473,334	660,003

It will be seen that Indian mills have practically a monopoly of the yarn trade below 30's counts and that Indian production of yarn between 31 and 40's counts exceeds the imports from the United Kingdom or Japan, though total imports are greater than the home production; as regards the higher counts, Indian production is something more than two-thirds of the imports. A proof of the fact that Indian mills are tending to spin higher counts is furnished by the following table which shows that while there has been a steady rise in the production of yarn during 1918-19 to 1920-21, the amount of raw cotton consumed has steadily decreased:—

	1918-19	1919-20	1920-21
Total production of yarn, lbs.	615,040,464	63,57,60,278	660,002,597
Cotton consumed, cwt.	7,299,873	7,154,805	6,833,113
Pounds of yarn per spindle lbs.	99.27	91.93	94.00

The proportion of imports of cloths affected by Indian competition is thus estimated by Mr. Ainscough, the British Senior Trade Commissioner in India and Ceylon:—

Average of five years ending March 1914.

Description.	Annual average value of imports (1909-10 to 1913-14.)	Estimated proportion affected by Indian competition.	Estimated value of imported cotton piece goods affected by In- dian competition
	£.	%	£.
Grey (unbleached) :-			
Chadars ...	48,345	75	36,259
Dhooties, saris and scarves ...	6,905,037	22	1,519,108
Drills and jeans ...	301,645	1,00	301,645
Long-cloth and shir- tings ...	5,455,145	90	4,909,631
All other kinds ...	1,346,884	..	
White (bleached) .	7,468,859	5	373,443
Coloured, printed or dyed :-			
Checks, spots and stripes ..	90,266	60	54,160
Dhooties (including loongies) ...	610,263	30	183,079
Drills and jeans ...	340,530	1,00	340,530
Saris and scarves ...	1,009,852	16	
All other kinds ...	6,581,066	...	161,576
Total ...	30,157,892	...	7,879,431

According to this calculation a little over 26 per cent. of the total piece goods imports is affected by Indian competition.*

Metallurgical industries.

There is no lack in India of raw materials required for the development of metallurgical industries. This fact was well known to the ancients. Nearly 300 B. C., Megasthenes wrote that India "has under-ground numerous veins of all sorts of metals, for it contains much gold and silver and copper and iron in no small quantity, and even tin and other metals which are employed in making articles of use and ornament as well as the implements and accoutrements of war."*

Writing in 1881 in the introduction to his "*Economic Geology of India*" V. Ball thus commented on the passage quoted above:—

"To many it may appear that it was a fanciful and fabulous India, very different from the country as it is now known to us. To such the facts set forth in this work not only as to the extent of the mineral resources, but also as to the extent of the ancient mining operations, will come almost as a revelation."

"Speaking generally, the value of the majority of the deposits is relative to external circumstances. Were India wholly isolated from the

* Report on the Conditions and Prospects of British Trade in India at the close of the War, by Mr T. M. Annesley (Cmd 442), p. 37.

* 'Industrial Handbook' published by the Indian Munitions Board, p. 123.

rest of the world, or were her mineral productions protected from competition, there cannot be the least doubt that she would be able, from within her own boundaries, to supply very nearly all the requirements, in so far as the mineral world is concerned, of a highly civilised community. But the consumer would probably have to pay more than he does at the present day".

About 1881, however, no important metallurgical industries, working on modern lines, existed in India. It was in 1885 that the Mysore Gold Company was founded. The Barker Iron Works were, indeed, established in 1875, but it was not until 1899 that the Company, under the present Managing Agents, Messrs. Martin and Company of Calcutta, succeeded in producing pig iron at a profit. Thus at the beginning of the present century the only successful metallurgical works were the gold milling and reduction plants of Kolar and the Barker Iron Works. Great progress has, however, been made during the last 20 years. In 1903 the Hutt Gold Mines (Hyderabad State) commenced operations. In 1907 the Tata Iron and Company was established. In 1909 the Burma Mines, Limited, was started, and they are now smelting for lead and silver. The Indian Iron and Steel Company was floated in 1918 with the object of producing pig iron. In the same year the regular production of blister copper was started in India.

The production of metals in India from 1908 to 1917 is shown by the following table:—

	1913	1914	1915	1916	1917	1918	
Gold	5 957 761	607 788	616 728	598 269	574 293	578	
Platinum	Ozs 577	Ozs 367	Ton 177	Ton 97	Ton 38		
Silver	Ozs 125 209	Ton 236 446	Ton 265 387	Ton 760 374	Ton 581 831	Ton 1 395 212	^(a)
Copper	Tons 5 858	Tons 10 548	Tons 13 235	Tons 13 790	Tons 16 964	Tons 13,182	^(b)
Lead							^(c)
Tin —							
Metal	Tons 182	Tons 98	Tons 128	Tons 113	Tons 141		
Ore	Tons 171	Tons 270	Tons 431	Tons 650	Tons 666		
Cast Iron	Tons 704 112	Tons 234 726	Tons 241 794	Tons 2447 10	Tons 248 132		
Steel	Tons 63 175	Tons 66 603	Tons 76 355	Tons 92 902	Tons 114 027		
Hero manganese	Tons						
				Tons 2 658	Tons 1 843	Tons 1 475	Tons 1 150

^(a) To end of August 1918^(b) The production of steel copper commenced August 1918^(c) Monthly output

IRON AND STEEL.

The Tata Iron and Steel Company.

The Company, as has been stated above, was started in 1907; it commenced active operations in 1912. It owns several iron mines and limestone quarries; magnesite deposits in the Mysore State, and nine large coal mines, four of which are located on the Jharia field. The present position of the Company is described in the following extract from the report of the Directors for the year ended 31st March 1921:—

The Directors state that "the original scheme for the greater extensions provided for two blast furnaces, one duplex (steel) furnace, a plate mill, a continuous sheet bar and billet mill, sheet mills and a merchant mill with their requisite miscellaneous equipment. The original plan has undergone many alterations and additions. In 1917-18 the scheme was enlarged considerably. In 1917 one additional blast furnace (the Batelle furnace) was purchased, and it has been in operation since August 1919; a blooming mill, a rail and structural mill and a second Duplex furnace were added; the capacity of the plate mill was increased, and substantial additions were made to the continuous sheet bar and billet mill, the sheet mills, and the merchant mill as a result of improvements in design and with the object of increasing their capacity. In order to provide the raw materials required for the increased production the company has made large additions to its reserves of coal, ore and fluxes,

and now has in sight and under its own control fully adequate supplies for the near future. The development of the towns has naturally kept pace with this expansion, and in 1918 the company obtained an additional 20 square miles of land to provide for the suitable housing of its workmen and for the subsidiary industries which will eventually be grouped round the steel works. This is the scheme for the greater extension as it stands at present.

"The production of finished products available for sale for the past year was 88,960 tons of pig iron and 120,570 tons of finished steel. When the entire scheme given above is carried through, the production available for sale will be 174,000 tons of pig iron and 425,000 tons of finished steel. It is not possible to say definitely in what exact shape this material will be put upon the market. The new plant, when completed, will have a large reserve of rolling power and our steel will be diverted from one mill to another in accordance with the fluctuations of the market and the competition which enters it. But we expect to work up to this production within four years. All such estimates of future production must necessarily depend upon many circumstances which in the present state of the world no man can forecast with absolute certainty. We estimated that the original scheme for the extensions would be completed by July 1921. Since that estimate was made the whole scheme has been enlarged, the design has been improved, and many additions have been made owing to alterations in practice which have been discovered since the

original plans were laid. The site has also been changed. These alterations have been made on the best expert advice and will undoubtedly tend to greater economy in working. They have, however, inevitably delayed the completion of the scheme. Our progress has also been delayed by many factors which could not have been foreseen; by restrictions imposed by the various Governments upon manufacture and shipment both during and after the war; by the prevailing unrest and continual strikes which have occurred both in Europe and America; by the shortage of ocean labour and materials in India; by the congestion of the port of Calcutta; and by many other causes which have followed directly and indirectly from the war and which have been entirely outside our control. The constant fluctuations in exchange and prices have also materially affected the prices which we have had to pay. In spite of all these difficulties the Batelle Furnace is actually in operation, the plate mill is practically complete, and two more blast furnaces and one Duplex furnace will be ready to operate in 1922**

It was intended to start a number of subsidiary industries in the neighbourhood of Sakebi in connection with the steel works. The manufactures which it was intended to produce included steel tubes and pipes; tinplate; enamelware of various descriptions; railway wagons; spelter; wire shapes of various kinds, including fencing

* Quoted by Ainscough in "General Review of the conditions and prospects of British trade in India during the fiscal years 1919-20 and 1920-21", p. 59.

wire, nails etc ; tea machinery ; structural tools ; galvanised products ; jute mill machinery, structural work, iron and steel castings, heavy chemicals ; sulphuric acid, nitric acid, fertilisers, explosives ; drugs and perfumes. Owing to unforeseen difficulties the progress made in the development of subsidiary industries has been small, as the following extract from the report of Directors will show —

" One subsidiary, the Calcutta Monifieth Works, has started the manufacture of jute mill machinery but progress of the others has been delayed by the unusual circumstances of the past year. Capital cannot at present be easily raised, and increased cost of machinery and plant from abroad has delayed the completion of their projects. In some cases the schemes which were under consideration have been definitely abandoned. These include the Burma Corporation project for the smelting of zinc and our negotiations with the Eastern Chemical Company, Messrs Seward & Lloyds, Messrs Vickers, and Messrs Jesop & Co Ltd. We are however, still negotiating for the establishment of plants for the manufacture of railway wagons and locomotives, agricultural implements, wire products, tin plates, enamelled ironware, cables and special steel for reinforcement. We have every reason to expect that these and other manufactures will ultimately be established at Jamshedpur and will use our steel in ever increasing quantities as the industrial development of the country grows. But for the present we do regret a certain limi-

tation of our commitments for the supply of material at special prices.*

The Bengal Iron and Steel Company.

The Bengal Iron and Steel Company took over the Barker Iron Works in 1889 and it came into the hands of the present Managing Agents, as mentioned above, in 1899. It works at Kulti on the Bengal coal-field. It has four blast furnaces, each with a possible output of 50 tons of pig iron a day. The total output of pig iron is about 10,000 tons a month. In 1918, at the instance of the Indian Munitions Board, the Company turned one of their blast furnaces to the manufacture of ferro-manganese. The production of the Company in 1910 amounted to 84,965 tons of pig iron, 4,732 tons of ferro-manganese and 29,635 tons of iron castings. The Company has specialised on castings and the works contain a large foundry making pipes up to 12 inches in diameter, bends, columns, fencing sockets, pot sleepers and chains; and another foundry capable of producing castings up to 20 tons in weight.

The Indian Iron and Steel Company.

The Company has not yet started active operations, but its first furnace is expected to be ready very shortly.

Plans are being matured for starting two other iron and steel projects.

* Ibid. p. 60

The recent discovery of a mountain range of iron ore in Singhbhum (Orissa) is of very great importance to the Indian iron and steel industry. It is expected that Singhbhum will provide reserves of high grade iron ore sufficient for all the requirements of the Indian iron and steel industry and also for the neighbouring Eastern markets.

Imports.

The total imports of iron, iron or steel, and steel in 1913-14 were as follows :—

	Tons
Iron (excluding ore)	... 46,692
Iron or steel	... 718,471
Steel	... 235,085

The share of the more important countries in the import trade is shown by the following table :—

1913-14.	Iron (ex- cluding ore.)	Iron or steel.	Steel.
	per cent.	per cent.	per cent.
British Empire	...	58	75
Germany	..	5	14
Belgium	...	31	7
United States	.	·07	3
Japan	·007

During the war the imports from Germany and Belgium ceased while those from the United Kingdom declined heavily, but there was a steady increase in the imports from the United States and Japan, as is shown by the following table:—

	1913-14	1914-15	1915-16
	£ 1,000	£ 1,000	£ 1,000
Iron (excluding ore) —			
United Kingdom	242	147	204
Belgium	102	18	
Sweden	30	19	20
Other countries	19	5	11
Total	393	184	235
Iron or steel —			
United Kingdom	6,810	4,640	3,686
United States	270	340	1,198
Belgium	429	150	35
Japan		7	10
Germany	877	260	26
Other countries	115	81	120
Total	8,501	5,478	5,075
Steel —			
United Kingdom	402	247	353
United States	12	28	393
Belgium	702	292	9
Germany	647	273	23
Other countries	14	10	11
Total	1,777	850	819

1916-17.	1917-18.	1918-19.	1919-20.	1920-21.
£ 1,000	£ 1,000	£ 1,000	£ 1,000	£ 1,000
430	244	71	283	666
9	7	3	30	175
11	50	193	101	63
450	301	267	499	957
8,261	1,947	2,564	8,487	17,851
1,445	2,018	2,481	4,090	4,576
8			132	931
58	227	663	89	50
7			2	252
145	327	508	171	529
4,919	4,519	6,216	12,921	24,189
351	153	147	1,298	3,736
176	179	1,047	1,209	579
1		...	237	1,317
22	20	623	21	324
551	351	1,817	141	196
				6,152

It will be seen that the imports of iron-ore steel in 1918-19 from Japan were about one-fourth of the total imports from the United Kingdom, while those from the United States were about equal in value to the British imports; the American imports of steel far exceeded in value the British imports. In 1919-20, and particularly in 1920-21, while the American imports have remained practically stationary, British imports have rapidly increased.

JUTE.

The following passage taken from the Imperial Gazetteer of India, Vol. III, relates the early history of jute:—

"Jute fibre was first experimented with by Europeans in 1820, the result being so unfavourable that brokers were for some years subsequently required to give a guarantee that sales of fibre effected by them were free from adulteration with jute. One of the earliest commercial references to the fibre occurs in the Customs returns of 1828. In that year 364 cwt. of raw fibre, valued at Rs. 620, were exported to Europe. The manufacture of gunny bags and cloth was at that time entirely in the hands of the Bengal peasant weavers, but the traffic could not have been very extensive. In 1832 an enterprising Dundee manufacturer experimented once more with the fibre, and was able to show that it might be used as substitute for hemp. From that date jute gained rapidly in popular favour. It was recognised that it was capable of the most minute separation, but it is only within the past few

years that this advantage has been utilized for the finer textile purposes. In time the difficulty of bleaching and dyeing the fibre disappeared; and the success of jute being thus assured, the foundation of the manufacturing enterprise of Dundee and Calcutta was laid."

There were in 1913-14, 64 jute mills at work in India with 36,050 looms and 744,288 spindles, giving employment to 216,288 persons.

The outbreak of war caused a crisis in the jute industry. Before the war Germany was next to the United Kingdom India's best customer for raw jute. Germany took about 800,000 bales annually, and 250,000 went to Austria-Hungary. The sudden closing of these markets to the exports of jute, combined with a bumper crop, brought down the price of jute from Rs. 86.8 per bale of 400 lbs. in April 1914 to Rs. 31 in December of the same year. The exports of raw jute showed a heavy decline in 1914-15, and remained below the pre-war standard throughout the war. The exports of jute manufactures, however, steadily increased during the war. The war was a period of great prosperity for the jute industry. The war demand for jute manufactures was strong, labour was plentiful and prices realised by the mills were high. The following table shows the progress of the jute industry during the war:—

	Number of mills at work	Nominal capital in lakhs of Rs.	No. in thousands		
			Persons employ- ed	Looms	Spindles.
1914-15	70	1,394 3	238	38 4	795 5
1915 16	70	1,372 5	254	39 9	812 4
1916 17	74	1,402 4	262	39 6	824 2
1917 18	76	1,428 4	266	40 6	834 0
1918 19	76	1,447 2	270	39 3	823 7

Wool

Five woollen mills were working in India during the war, in addition, a small disused woollen mill in Bombay was utilized for the manufacture of blankets. The home production now amounts to 6,000,000 yards of woollen and worsted cloths, 5,000,000 items of hosiery, such as socks, jerseys, mittens etc, 1,250,000 pairs of woollen putties, 1,500,000 blankets and *jhools*, and 50,000 yards of felt. India is, however, by no means independent of foreign supplies of woollen goods, as is shown by the following table —

In thousands.

	1913-14	1917-18	1918-19	1919-20.	1920-21
Piece goods, yds	27,329	9,230	5,663	3,377	11,007
Shawls No	2,101	21	7	19	16
Carpets and rugs,					
lbs	1,980	373	207	58	483
Hosiery lbs	537	247	245	9	325
Yarn and Knitting wool, lbs	1,059	217	265	94	320
Other sorts lbs	1,593	230	164	274	551

Before the war the largest number of shawls was imported from Germany and Austria-Hungary. In 1913-14, of the total number of shawls imported, 2,101,748, no less than 1,594,939 (£294,147) came from Germany, and 93,895 (£13,102) from Austria-Hungary. The decline in the imports of shawls is due to the temporary elimination of the Central Powers from our markets. Of the total value of imports of woollen goods in 1913-14, £2,568,168, Germany's share was £716,334, and Japan's only £925. In 1920-21 the imports from Japan were valued at £232,000.

PAPER.

The history of paper making in India with modern appliances begins in 1867 when a paper mill was established at Bally, though as far back

as 1811 the missionaries at Serampore used machines to make paper for the Missionary Press. There were six paper mills working in India before the war. The mills chiefly used *sabai* grass as their raw material, in addition to importing some 13,000 tons of wood-pulp (1913). The difficulty of importing wood-pulp during the war led the mills to make a more extensive use of *sabai* grass and other raw materials obtained from Indian sources. There are now nine paper mills, producing in all about 32,000 tons of paper per annum, the imports in a normal year are estimated at double the output of all the Indian mills. The Indian paper making industry cannot be said to be in a satisfactory position. The Indian mills cannot compete with paper made from wood pulp. The paper made from grass is of a better quality than that made from wood-pulp, but it is more costly, and the market for it is limited. The Canadian Trade Commissioner, in a report published in 1916 thus sums up the situation "The paper manufacturer in India is unfortunate. He is shut out from his most important market, that for cheap papers, by the high cost of his pulp. The domestic market for good papers for which his pulp is suitable is not large enough to be worth his while."* At the present time, in consequence of trade depression in England, British manufacturers are selling paper in India "at prices which they openly declare are below the cost of production." The

* Quoted by Mr. A. R. Barbour in his article on "The modern paper making industry in India," in the Journal of Indian Industries and Labour for November 1921.

effect of this dumping on the home industry, if it is allowed to go on unchecked, must be disastrous. The Indian paper manufacturer has also suffered much from the policy of our railways to discriminate in favour of the importer.

There is very little doubt that the paper making industry would be encouraged by the adoption of measures which prevent dumping and protect it against foreign competition. The improvement in the provision of railway transport and favourable treatment in regard to railway rates would materially assist the industry. The Government can further render valuable help to the industry by buying supplies as far as possible in India.

TANNING AND LEATHER.

Apart from a great number of small tanneries which exist in Southern India, the Bombay Presidency and the Punjab, there were in India before the war 7 large tanneries capable of producing really good leather. During the war 5 more tanneries were started, and since the conclusion of peace 18 new tanneries have come into existence. With the large amount of leather which these 30 tanneries will produce when they are fully working, the prospects of the extended manufacture of boots and shoes in India seem to be very bright.

There has also been a satisfactory increase in the production of soap, glass and Portland cement. Two companies have recently been started to manufacture enamelled hollowware. Paints, varnishes and painters' materials are not yet made in India, but most of the raw materials

required for this group of industries are available in India and it is to be hoped that the manufacture of these articles will be undertaken in the near future. As regards electrical goods, electrical fittings such as water-tight lanterns, deck fittings, iron-clad plugs and sockets, hand lamps, table lamps, plain glass globes and the like are now made in India. It will probably take long to make electrical machinery in India, as it is very complicated and as the requisite materials, such as cast iron of high permeability, mild steel, thin iron plates with special magnetic properties, etc., are difficult to obtain here.

Attempt is also being made to develop the various chemical industries, as the establishment of these industries is essential to the progress of textile and other industries. A list of chemicals manufactured in India has been published by order of the Government of India as a *Bulletin of Indian Industries and Labour*, No. 21.

The steps taken by the Government to encourage Indian industries during the last six or seven years constitute the greatest departure from the policy of *laissez faire* which was the keynote of the Government's industrial policy before the war. Departments of Industries have been established in every province. The Provincial Directors of Industry meet every year in conference to consider questions relating to Indian industries and labour. The recommendations of the Industrial Commission are being given effect to. "Pioneer" and "demonstration" factories are being established in some provinces. It is proposed to set up a demonstration tannery

in the neighbourhood of Calcutta. This would be an Imperial undertaking. Among provincial ventures may be mentioned : the Demonstration Pottery Factory in Bombay ; the Pencil Factory, Aluminium Factory, the Soap Works, a Jam and Pickle Factory and a Glue Factory in Madras, and a tanning school at Nagpur. It is also proposed to start a Boot Demonstration Factory either at Lahore or Amritsar and a Dyeing Factory at Lahore. The object of the Dyeing Factory would be to provide instruction in the use of chemical dyes ; it will also experiment in vegetable dyes. A "pioneer" factory, it may be explained, is one established by Government on a small commercial scale in order to ascertain and overcome the initial difficulties and discover if the industry can be worked at a profit. Government undertakes the pioneering of industries when private enterprise is not forthcoming. "Demonstration" factories serve as schools for the training of men as operatives, foremen or managers under strictly commercial conditions. In some cases the object is to show how local industrial practice may be improved.

An important but somewhat complex question is that of financial assistance to new industries. The industrial banks now existing in the country (the largest of these banks is the Tata Industrial Bank) are doing very little for Indian industries. They are mostly engaged in ordinary banking business, not industrial business. The Industrial Commission recommended the appointment of an expert committee to formulate schemes for the establishment of industrial banks, but in view of the recent

amalgamation of the three Presidency Banks into the Imperial Bank of India the appointment of the expert committee has been deferred. One of the conditions of the formation of the Imperial Bank was that 100 new branches should be established within five years, but it may be doubted whether the new branches of the Imperial Bank would afford any real financial help to Indian industrialists. The existing industrial banks find it difficult to finance middle-class industrialists as they do not possess adequate information about their financial position. The creation of a Government organisation to inquire into the solvency and standing of such applicants seems to be necessary. At a recent conference of Directors of Industry, Sir Alfred Chatterton, the industrial adviser of the Tata Bank, said that for large undertakings the Tata Bank would institute its own inquiries and make loans without any reference to Government; for medium undertakings (loans over Rs. 5,000) the Bank required a preliminary enquiry and report by a competent Government officer before granting a loan, for small transactions (less than Rs. 5,000) the Bank would require a Government guarantee.

It may be stated that Provincial Governments now enjoy full powers regarding loans to industries. They can give cash grants, recurring and non recurring, at their discretion, and make loans from the Provincial Loan Account to any extent they consider necessary. These powers have been conferred upon Local Governments by the new Government of India Act. The next

few years will show how far the provinces use their new powers to develop local industries.

Reference may also be made here to the report of the Indian Stores Purchase Committee, which was appointed at the instance of the Industrial Commission to make detailed suggestions regarding the purchase of stores. The Committee recommends that complete freedom should be granted to India as to the stores rules, and that it should be accepted as a policy, not only in theory but also in practice, that all stores required for the public service shall be obtained in India whenever they are procurable in the local market of suitable quality and reasonable price, preference being given to articles of Indian origin.

The bearing of India's fiscal policy upon the development of Indian industries is being considered by the Indian Fiscal Commission. Judging from the evidence given before the Commission by Indian witnesses, Indian opinion seems to be practically unanimous in demanding some measure of protection for Indian industries. Indian opinion, while it strongly supports protection, is, at the same time, most determinedly opposed to that form of protection known as Imperial Preference, which means protection for the British manufacturer at the expense of the Indian consumer. The prospects, however, for the adoption of an independent fiscal policy with the object of making use of the tariff for assisting Indian industries do not seem to be very hopeful. Mr. Montagu, the late Secretary of State for India, declared sometime ago that India had been

granted her fiscal freedom. But Mr. Montagu has been driven from office and opinion in England, under the influence of Lancashire, now seems to incline in favour of the view that it was never intended to give India complete control over her tariff arrangements. It is significant that the Finance Member of the Indian Government, Sir Malcolm Hailey, while proposing additional taxation for 1922-23, suggested an increase in the excise duty on cotton goods made in Indian mills from 3½ to 7½ per cent. along with the proposal to raise the import duty on cotton goods from 11 to 15 per cent, and that when the Legislative Assembly rejected the proposal to increase the excise, he declined to support the increase in the import duty on cotton. For 1922-23, India has a large uncovered deficit, and the increase in the import duty on cotton would have reduced the deficit by more than a crore. It is difficult to see how India will be allowed to levy protective duties on British imports when objection is taken to raising the tariff even for revenue purposes. And yet, since England herself has accepted the principle of "safeguarding" industries, she cannot, in fairness, deny India's demand for protection, which is only another name for "safeguarding" industries. The ultimate decision of the question, in the opinion of the writer, will be largely determined by political influences, whatever be the report of the Indian Fiscal Commission, and it will be long before India gets complete fiscal autonomy. Perhaps it is vain to talk of fiscal autonomy without political autonomy.

India's Foreign Trade during the War.

There was a reduction in the value of exports and imports in 1914-15. The reduction was due to the cessation of trade with enemy countries, the curtailment of trade with France and Belgium, the restriction of trade with neutral countries, the scarcity of tonnage and the disorganisation of the world's exchanges. The total value of exports (including re-exports) in 1914-15 was £ 121,061,000, as compared with £ 165,919,000 for the pre war year 1913-14; the imports fell from £ 122,165,000 in 1913-14 to £ 91,957,000 in 1914-15. The effect of the outbreak of war on our foreign trade is, however, more clearly seen if we divide the year 1914-15 into two periods, (1) April to July (2) August to March, and compare the trade in the eight war months from August to March with that for the corresponding period of the previous year:—

[Table

(Lakhs of rupee.)

	1913-14. April to July.	1913-14. August to March.	1914-15. April to July.	1914-15. August to March.
Imports	56,05	1,27,20	54,77	83,16
Exports	78,12	1,66,08	82,01	95,47
Re-exports	1,54	3,14	1,59	2,52

Increase (+) or decrease (-)

(Lakhs of rupees).

	April to July.	August to March.
Imports	-1,28	-44,04
Exports	+3,89	-70,61
Re-exports	+5	-62

The total decrease in the war period was thus a little more than 115 crores of rupees.

The fall in exports, as will be seen, was of a more serious character than the decrease in imports, and it produced serious consequences. In 1913-14, 10 per cent. of our exports went to Germany and 3·5 per cent. to Austria-Hungary. Taken together, these two countries were important purchasers of our raw produce, particularly food grains, raw cotton, raw jute, seeds and hides and skins. The closing of their markets to our produce, combined with the curtailment of exports to France and Belgium, brought about a fall in the value of cotton, jute, oil seeds etc. which inflicted severe losses on our growers of these products.

When however, the first shock of war was over, both our export and import trade began to expand, though the recovery in the import trade was slower. In 1915-16 the total value of imports was £ 87,991,000 as compared with £ 91,953,000 for the preceding year, but the exports in 1915-16 were greater than those in 1914-15 by £ 10, millions. The increase in the exports of jute, tea, gunny bags, and cloth was noteworthy.

In war time it became necessary for Government to control trade generally and to restrict trade in particular articles. Soon after the outbreak of war ordinances were issued providing for the temporary impressment of vessels, prohibiting financial and other dealings with enemy states, and making it possible to obtain information as to the stocks of articles of commerce, and for taking over by Government of stocks un-

necessarily withheld from the market. The general policy of Government, as stated by the Finance Member in his Budget speech was to " (a) restrict trade in food stuffs and articles capable of being turned to warlike uses in the case of countries whence they can pass to the enemy ; (b) to stimulate the export of a few articles to the United Kingdom and Allied countries, or countries which are making munitions for the Allies, and (c) to restrict the export of a very few articles owing to their being needed in India "

Apart from restrictions imposed upon trade by Government, trade was much hindered throughout the war by the scarcity of tonnage and the consequent abnormal rise in freights. About freights in 1916-17 the *Review of the Trade of India* for that year says —

" Two additional factors in the year's trade were the famine in tonnage and (in the last quarter of the year) difficulties connected with finance on account of the curtailment of Councils. With regard to the former, the words 'no ships' are writ large on almost every page of the Review. In many respects this may be regarded as the principal event of the year. At the close of the year freights, in consequence of the tonnage difficulty rose to fourteen times their pre-war level "

The rise in freights partly worked in our favour, for while it did not prevent the export of such articles as were needed for war purposes, it diminished imports and thus helped to swell the balance of trade in our favour.

The exports from India are ordinarily of a much greater value than the imports into India. In the quinqueumum immediately preceding the outbreak of war the average net exports from India amounted to £ 52 millions. The average net exports during the corresponding war years, as will be seen from the figures given below, amounted to about £ 51 millions : -

	Exports £ 1,000.	Imports £ 1,000.	Net Exports. £ 1000.
1914-15	121,060	91,953	29,107
1915-16	131,641	87,991	43,650
1916-17	163,969	99,757	64,212
1917-18	161,709	100,283	61,426
1918-19	169,254	112,689	56,565
Average	149,524	98,534	50,990
1919-20	326,793	207,972	118,821
1920-21	256,347	335,603	-79,256

The average balance in India's favour in the war period was slightly less than in the corresponding pre war period. This was chiefly due to the unfavourable conditions in the first two years of the war. India enjoyed exceptionally favourable balances during the last three years of the war, while in 1919-20 the net exports attained the record figure of £ 118,821,000. The war demand for some of our exports as jute manufactures, tanned hides, rubber, oils, tea, gram,

cotton and woollen goods and leather manufactures was very considerable, and in spite of a rising exchange the exports increased rapidly.

The rise in prices was a very important cause of the increase in the value of imports and exports during the war. In many cases it conceals a decline in the actual quantities exported and imported. For example, the declared value of the imports of merchandise in 1918-19 was Rs. 169 crores, showing an increase of Rs. 19 crores over 1917-18, but if the quantity of goods imported in the two years is considered, that is if the value of the imports in 1918-19 is recalculated at the price of 1917-18 and a comparison is made on this basis, imports in 1918-19 as compared with the preceding year are found to have decreased by Rs. 10 crores. Similarly the declared value of exports in 1918-19 exceeded that of exports in 1917-18 by Rs. 43 crores, but the volume of exports had at the same time decreased by Rs. 37 crores.

Table IV shows the volume and value of exports and imports for 1920-21 recalculated at the prices of 1913-14. It will be seen that the value of imports in 1920-21 was no less than Rs. 153 crores in excess of that for the pre-war year, while the volume of imports shows a decline of Rs. 41 crores. In regard to exports, while the nominal decrease is about Rs. 6 crores, the real decrease in the volume of trade is Rs. 72½ crores.

The unfavourable balance of trade in 1920-21 was due to several causes, the most important of which was the rise in exchange during the first

quarter of 1920. It is well known that a rising exchange tends to check exports and to stimulate imports. The Indian Currency Committee of 1920 recommended the raising of the exchange value of the rupee to 2s. (gold), Government accepted this recommendation and attempted by the sale of bills on an unprecedented scale to keep up exchange. Large orders were placed with foreign manufacturers by Indian importers who wished to take advantage of a high exchange. It should be remembered that in most cases orders have to be placed three or six months before goods can arrive in the importing country, and in the case of machinery, even twelve months before. The heavy imports of machinery in 1920-21, about double the imports in 1913-14, were in execution of orders placed with British manufacturers long before. They were due to the industrial boom in India. The imports of railway plant and rolling stock during the war were very small, and large quantities had to be imported in 1920-21 in order to make good the deficiency.

The decline in exports was partly due to the disorganisation of the European exchanges, but chiefly to the glut in the world's markets. We have seen that exports in 1919-20 were abnormally high, a reaction was bound to set in. The United Kingdom, Japan and America are our principal customers — between them they took about 46 per cent. of our exports in 1920-21, but the fall of prices in these countries shows that their stocks are full, and at present they do not require more of our produce. It thus happens that

countries which are in a position to pay for what they buy, do not want to buy, while countries like Russia and Germany, which would like to buy, cannot buy on account of their inability to pay the price, as shown by the chaotic state of their exchanges.

An important feature of our foreign trade during the war was the increase in the trade with the British Empire. As is shown by Table III, the percentage share of the British Empire in our foreign trade increased from 52.9 per cent. (the average of five pre-war years) to 57.1 per cent. This result was due to the increase in exports to the British Empire, imports from the British Empire during the war were below the normal. Exports to foreign countries decreased from an average of 56.1 per cent. to 48.3. However, both our export and import trade with Japan and the United States have grown very rapidly. Imports from Japan in 1920-21 were eight times greater than in 1913-14, American imports increased ten times. Of our exports, Japan took 14.3 per cent. in 1919-20, and the United States 14.9 per cent., as compared with 2.5 per cent. and 3.1 per cent. respectively in 1913-14.

I.—Statistics of average Maritime Freight & Rate per ton

	Bombay to London			Bombay to Liverpool			Rate per ton
	Wheat	Cotton	Seed	Wheat	Seed	Rate per ton	
1914	0 13 5	0 14 0	0 14 0	0 12 6	0 14 0	0 14 0	
1915	1 19 0	1 15 8	3 9 0	1 19 0	1 9 10	1 9 10	
1916	5 12 6	5 13 3	3 9 0	6 7 0	5 10 10	5 10 10	
1917	10 8 4	2 19 2	10 4 2	10 10 8	9 5 0	9 5 0	
1918	3 15 0	10 11 8	16 5 3	14 11 8	9 19 0	9 19 0	
1919	5 17 2	4 8 2	6 8 4	3 15 0	4 8 0	4 8 0	
1920	1 19 4	1 9 7	1 1 8	1 14 3	1 5 0	1 5 0	
1921							

450 INDIA'S FOREIGN TRADE DURING THE WAR

II.—Value of Trade in Merchandise only with
A.—IMP

Countries	1913-14	1914-15
British Empire ..	85,377	68,095
U S A ..	3,193	3,120
Japan	3,187	2,966
France	1,794	1,175
Italy ..	1,464	1,015
Belgium	2,838	1,086
Austria-Hungary	2,860	861
Germany	8,444	3,100
Total Foreign Countries including other Countries	36,788	23,858
Grand Total	122,165	91,953

the British Empire and Foreign Countries.

ORTS.

(In thousands of £ sterling.)

1915-16	1916-17	1917-18	1918-19	1919-20	1920-21
59,534	65,580	64,251	64,658	125,456	221,586
5,247	7,334	7,877	10,766	25,267	35,298
4,998	8,889	12,173	22,349	19,153	26,430
1,329	1,358	1,087	1,231	1,769	3,637
1,337	1,649	1,181	611	1,369	4,134
154	26	4	4	698	5,326
3	10	42	...	127	639
307	52	7	...	43	4,748
28,457	34,177	36,032	48,031	82,516	114,017
87,991	99,757	100,283	112,689	207,972	335,603

B. - EX
(Including)

Countries	1914 1915	1914 1915
British Empire	62,928	57,829
U S A	13 567	11 611
Japan	11,813	10 443
France	5 262	5,896
Italy	3 064	4 578
Belgium	6 674	3 514
Austria Hungary	17,613	3 020
Germany	17 613	6 798
Total Foreign Countries including other Countries	102 991	63,232
Grand Total	165 919	121,061

PORTS.

re-exports).

(In thousands of £ sterling.)

1915. 6	1916-17	1917-18	1918-19	1919-20	1920-21
72,948	82,010	84,886	88,343	144,288	109,534
14,176	20,835	20,378	22,182	48,782	37,850
12,302	18,835	22,774	19,658	46,863	24,239
6,285	9,561	5,761	5,963	15,882	8,198
5,989	6,479	5,705	6,475	7,877	6,706
154		-	7	10,102	12,840
..	..	..	98	366	856
..	..		...	1,387	8,824
58,693	81,459	76,823	80,911	182,505	146,813
131,641	163,969	161,709	169,254	326,793	256,347

III. Percentage share of the principal countries

Countries.	Average of 5 pre-war years 1909-10 to 1913-14			Average of 5 war years 1914-15 to 1918-19.		
	Imports	Exports & re-exports	Total	Imports	Exports & re-exports	Total
U. Kingdom ..	62.8	25.1	40.0	56.5	31.1	41.2
British Empire	69.8	41.9	52.9	65.4	51.7	57.1
Japan	...	2.5	7.5	5.5	10.4	11.2
Italy	..	1.0	3.2	2.3	1.2	3.9
U. S. A.	..	3.1	7.5	5.8	7.0	11.9
France		1.5	6.6	4.6	1.3	4.5
Belgium	...	1.9	5.3	3.9	3	5
Austria-Hungary.	2.2	3.5	2.9	2	4	3
Germany	...	6.4	10.0	8.6	7	9
Total including other foreign countries	30.2	58.1	47.1	34.6	48.3	42.9

tries in the total trade in merchandise only

1919-20			1920-21		
Imports	Exports & re-exports	Total	Imports	Exports & re-exports	Total
50 5	29 6	37 7	61 2	21 9	44 1
61 0	144 0	51 0	66 0	43 0	56 0
9 2	14 3	12 3	7 9	9 5	8 6
6	2 4	1 7	1 2	2 6	1 8
12 1	14 9	13 8	10 5	14 8	12 4
8	4 8	3 3	1 1	3 1	2 0
3	3 1	2 0	1 6	5 0	3 1
1	1	1	2	3	3
	4	3	1 4	3 4	2 3
39 0	56 0	49 0	34 0	57 0	44 0

IV—Volume and value of the Foreign
calculated at prices

	Value declared in 1920-21	Trade of 1920-21 calculated at prices of 1913-14
<i>Imports</i>		
Class I	35 97 14	1 86 05
Class II	17 10,55	10 23 66
Class III	27 49 60	1 15 86 60
Class IV	7 54 97	3 73 38
<i>Total</i>	3 35 60 26	1 41 69 69
<i>Exports</i>		
Class I	43 67 44	35 41 47
Class II	1 03 47 57	73 97 68
Class III	86 91 11	59 49 32
Class IV	4 29 27	2 70 21
<i>Total</i>	2 38 30 34	1 71 58 68

I Food Drink and Tobacco II Raw materials
III Articles wholly or mainly manufac-

*Sea-borne Trade of India for 1920-21**of 1913-14.**(In thousands of rupees).*

Value declared in 1913-14	Increase (+) or decrease (-) as compared with 1913-14		
	Due to variations in quantity	Value	Actual change recorded.
24,66,20	-12,80,15	+24,11,09	+11,30,94
10,55,76	-32,10	+6,86,89	+6,54,79
1,45,15,41	-29 28,81	+1,59,11 00	+1,29,82 19
2,87 42	+85,96	+3,81,59	+4,67,55
1 83,24,79	-41,55,10	+1,93,90,57	+1,52,35,47
64,74 35	-29 32,88	+8,25 97	-21,06,91
1,22,46,36	-48,48 68	+29 44,89	-19,03,79
51,59,11	+4,90,21	+27,41 79	+32,32,00
2 40,33	+29,88	+1,59,01	+1,88,89
2,44,20,15	-72,61 47	+66,71 66	- 5 89,81

and produce and articles mainly unmanufactured.
red. IV Miscellaneous and unclassified.

Protection for India.

When England adopted free trade seventy years ago it was thought that her example would lead to a general reduction of tariffs, so that at no distant date the reign of universal free trade would be established throughout the world. But time has falsified the predictions of Cobden and Bright. Before the war England was the only important country which still adhered to the principles of free trade. Since the conclusion of peace, not only have other countries revised their tariffs and made them heavier, but England herself has adopted some measure of protection against foreign competition. The Safeguarding of Industries Act is a frankly protectionist measure. "If the Government of the day," said Mr. Baldwin (President of the Board of Trade) in defending the Bill in Parliament against its critics, "saw that the country was faced with a flood of imports, it would be difficult for them to say to the people, 'There is nothing we can do to help you.' No Government faithful to its trust could neglect taking steps to protect employment in this country." Mr. Baldwin made it quite clear that the Bill was not a war measure. "It was opening an umbrella to shield our own people."

The case for free trade rests on the assumption that whatever promotes individual happiness also promotes the well-being of the whole community, that there is no conflict between individual and national interests. "Every individual," says Adam Smith, "is continually exerting himself to find out the most advantageous employment for whatever capital he can command. It is his own advantage, indeed, and not that of the society, which he has in view. But the study of his own advantage naturally or rather necessarily leads him to prefer that employment which is most advantageous to the society."* The tariff history of various countries, shows that this doctrine of the harmony of all interests has never commanded universal acceptance. And indeed it is difficult to see how the importation of dumped goods which ruins national industries, or the exportation in large quantities of food stuffs which raises the price of food to the home consumer, are most advantageous to a community, though they may be most advantageous to particular individuals. Schmolle severely criticises the idea that individuals, classes and states, in their dealings with one another, are directed by a Higher Power which, removing all conflicts, so regulates human intercourse that it conduces to the good of every one. The belief in the universal harmony of interests he declares to be 'psychologically insupportable'.†

* "The Wealth of Nations," Book IV Chapter II

† "Grundriss der allgemeinen Volkswirtschaftslehre" (1929) Vol. 2 p. 700

Adam Smith was generally opposed to all restrictions on foreign commerce the object of which was to give an artificial stimulus to home industries. He was the greatest advocate of non-interference in industry. Restraints upon imports he regarded as either useless or injurious, and he insisted that the consumer had a right to buy in the cheapest market. He says —

"To give the monopoly of the home market to the producer of domestic industry in any particular art or manufacture, is, in some measure, to direct people in what manner they ought to employ their capitals, and must, in almost all cases, be either a useless or a hurtful regulation. If the produce of domestic industry can be brought there as cheap as that of foreign industry, the regulation is evidently useless. If it cannot, it must generally be hurtful. It is the maxim of every prudent master of a family, never to attempt to make at home what it will cost him more to make than to buy. The taylor does not attempt to make his own shoes, but buys them of the shoemaker. The shoemaker does not attempt to make his own clothes, but employs a taylor. The farmer attempts to make neither the one nor the other, but employs these different artificers. All of them find it for their interest to employ their whole industry in a way in which they have some advantage over their neighbours, and to purchase with a part of its produce, or what is the same thing, with the price of a part of it, whatever else they have occasion for.

" What is prudence in the conduct of every private family, can scarce be folly in that of a great kingdom. If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage."*

The whole idea that the affairs of a country should be managed like those of a private family is wrong. Private families do not become involved in great wars which may threaten their very existence, but nations do. A nation cannot leave the development of her productive powers to chance, nature or " *unserem lieben Herrgott* " as List put it. The chief aim of the economic policy of a country should be the development of productive power. In the case of a country like India that is vast in extent and rich in natural resources, this aim will be best promoted by national, not international division of labour.

Apart from general considerations, there is a special reason, based on the peculiar circumstances of India, why every possible endeavour should be made to develop Indian manufacturing industries. This will be best stated in the words of the Indian Famine Commission of 1888:—

" A main cause of the disastrous consequences of Indian famines, and one of the greatest difficulties in the way of providing relief in an effectual shape, is to be found in the fact that the great mass of the population directly depends on agriculture and that there is no other industry from which any considerable part of the community derives its support. The failure of the

**The Wealth of Nations*, Book IV Chapter II

usual rain thus deprives the labouring classes, as a whole, not only of the ordinary supplies of food obtainable at prices within their reach, but also of the sole employment by which they can earn the means of procuring it. The complete remedy for this condition of things will be found only in the development of industries other than agriculture and independent of the fluctuations of the seasons. With a population so dense as that of India these considerations are of the greatest weight, and they are rendered still more serious by the fact that the numbers who have no other employment than agriculture, are in large parts of the country greatly in excess of what is really required for the thorough cultivation of the land. So far as this is the case, the result must be that the part of the population which is in excess of the requirements of agriculture eats up the profits that would otherwise spring from the industry of the community. It is not surprising that in a country thus situated material progress is slow."

The introduction of a diversity of occupations will diminish the numbers dependent upon agriculture and thus render our famines more manageable. Even to-day, 30 years since the publication of the report of the Famine Commission of 1880, which first drew pointed attention to this aspect of the question, more than 70 per cent. of our population are dependent upon agriculture. So many people are not wanted by the agricultural industry, and they are not all fully employed there. The diversion of the surplus agricultural population to manufacturing

industries will not make agriculture less efficient, while by creating material wealth in the towns the surplus agricultural labour would contribute to the well-being and prosperity of the whole community and of itself.

Would a tariff assist the development of Indian industries?

It would not be useful to consider here how far protection has succeeded or failed in the United States, Germany, France or the British Colonies, and it must be recognised that the industrial development of a country does not depend upon the tariff alone—it is largely influenced by such factors as the natural resources of a country, the means of communications, the availability of capital for large undertakings, and the presence or absence of skilled labour and of technical experts. A tariff is at best an indirect means of assisting industries. But it is an important means at the same time, for even when other conditions are favourable, the intensity of foreign competition may, as has been the case in India, prevent the rapid development of home manufactures. In such a case, a tariff, by checking imports, creates opportunities which the home producers, if they are enterprising, can turn to their advantage. That our producers and investors are not slow to profit by such opportunities was abundantly proved during the war. We were obliged during the war to try a protectionist experiment on a small scale. The diversion of labour and capital in belligerent countries from productive to war

employments and the shortage of shipping caused a serious and unprecedented shrinkage of the imports of foreign manufactured goods into India. The war, in fact, protected our industries. The result was a remarkable expansion of our manufacturing industries. The shrinkage of imports undoubtedly caused hardship to certain classes of our population, but it stimulated the production of all kinds of goods in India, and in this sense it was not an unmixed evil. The progress of our industries since the war has been reviewed in a preceding chapter. It has been shown that many new industries were started during the war and that old industries were enlarged and strengthened. It is here urged that the continuance of the new industries and the continued progress of the old industries depend upon the adoption of some measure of protection against foreign competition. The claims of the more important industries for protection are discussed below.

The need for the establishment in India of industries of national importance was emphasized by the Industrial Commission. In paragraph 83 of their Report the Commission said :—

"We desire, however, to draw attention here to the necessity of securing the inception in India of certain very specialised and essential industries which must be set up in this country at the earliest possible date, if grave dangers are to be avoided. Though in many cases the importation of technical specialists will be sufficient to enable our local industrial capitalists to

get to work, there are a few classes of articles produced only by firms which have attained efficiency in their manufacture after the experience of many years and the expenditure of much money. The machinery and apparatus which they employ is often manufactured only by themselves or to their own specifications, and its imitation in this country is not possible, nor, were it possible, would this be sufficient. Therefore, to attain its end, Government must take special steps to facilitate the manufacture of these articles in India. Among such industries we would include the production of such essential articles as magnatos, incandescent lamps, ferrotungsten, 'high speed' steel, graphite crucibles, special forms of porcelain for insulators, chemical glass, and probably also certain forms of 'heavy' chemicals, rubber and vulcanite. In other countries, foreign firms have frequently been encouraged to start branches by the existence of high tariff walls, there are also somewhat numerous examples of direct encouragement accorded to the establishment of foreign firms manufacturing lethal munitions, and we believe that there are several cases in which outside manufacturers have been helped to set on foot the production of articles needed in the interest of national safety, such as motor tyres and locomotives. There are many other important manufactures, which, though they must be carried out on a large scale, involve no secret processes that any well-trained specialist should be unable to initiate, and in the inception and initiation of this large range of important industries,

the organisation which we propose and the efforts of private industrialists will be more than fully occupied for a long time to come."

It may be pointed out that the manufacture of explosives is interconnected with that of synthetic dyes and drugs. The progress of these three essential groups of industries depends upon the development of the coal-tar industry. At the present time India produces insufficient quantities of coal-tar, but according to expert opinion, the introduction of plant for recovering benzene and toluene from the coke-oven gasses would make the manufacture of high explosives in India a practical proposition. In peace time, benzene could be used for the production of dyestuffs. The manufacture of explosives, synthetic dyes and drugs in India is thus within the bounds of possibility, and advantage should be taken, as far as possible, of a tariff to assist the establishment of these industries. The manufacture of alkalies is very important in this connection and it should be protected.

Large quantities of raw material are exported from India every year from which essential oils, medicinal drugs and other articles are prepared. Why these raw materials are not worked up in India is due to ignorance on the part of our enterprisers of the natural resources of the country, lack of information about appropriate and profitable methods of manufacture and the cheapness of the corresponding imported article. Some progress has been made in some of these industries, e.g., the pressing of oil seeds and the manufacture of soap, but there is great scope for

further expansion, and the imposition of protective duties on such imports should encourage their manufacture in India. There is very little reason why India should import paints and varnishes. The raw materials for making ordinary paints are all available in India, while as regards varnishes, there is no lack in India of linseed oil, turpentine and turpentine substitutes. Other new industries which deserve encouragement and which would benefit by protection are those which produce brushes, buttons, glue and gelatine. In each case abundant supplies of suitable raw materials are available in the country.

Among industries which owe their existence or their present position largely to the war, and which would gain by protection, the making of glass, hardware, cutlery and Portland cement may be mentioned. "The glass industry," says the Munitions Board's *Industrial Hand-book*, "has come to stay", but, without aid from the State, it is likely to make very slow progress in the future. The State aid to this industry might both be direct and indirect. The progress of the industry during the war was due to the absence of foreign competition. The revival of foreign competition in an intense form, with the gradual return of normal conditions, would be disastrous to the industry. The manufacture of hardware and cutlery also received a great stimulus during the war, but their survival under peace conditions depends upon the quantity and price of foreign imports.

Among the older industries, paper stands in immediate need of protection, though protection

is only one of the ways in which Government can help this industry. The growth of the tanning industry makes it possible to manufacture boots and shoes in India on a large scale, and in time, with the help of a tariff, India ought to become independent of the imported article.

The most important of our mill industries is the Bombay cotton industry. It has been said that the Indian cotton industry is no longer in the infant stage, and that its development in the past without the aid of protection shows that it can do without protection. Mr A C Coubrough in his "*Notes on Indian Piece Goods Trade*" says —

"The steady progress of the Indian cotton mill industry shows that a protective tariff was not necessary for its development and that the countervailing tax did not prevent this development. On the other hand, the imposition of higher duties on imported piece goods has not reduced the amount which India has spent in recent years on such goods. It does not appear that high tariffs are responsible for the smaller yardage of imported goods purchased by India. It is high prices that are responsible, caused by high rates of wages and absurd inflation of capital."

It can, however, be urged that the progress of the cotton industry, if it had been protected, would have been more rapid still. Again, we have to remember that about 75 per cent of the imports of cotton goods into India are non-competitive. In respect to these imports the

Indian industry is still in the infant stage. It is only recently that Indian mills have begun to spin higher counts, and it is to be hoped that they will become increasingly able to produce finer varieties of goods. It is a matter of grave concern that at the very time when increase in the demand for finer cotton fabrics made in India would have encouraged the Bombay mills, boycott of all cotton cloth except *khaddar* made by the *charkha* has been started. The boycott of Indian mill cloth, however, can never be successful, and duties on cotton goods which would encourage the consumption of Indian mill cloth by raising the price of imported cloth would be of material assistance to the Indian industry. In view of the enormous imports of cotton goods (valued at 120 crores in 1920-21) it may be said that any scheme of protective duties which did not include duties on cotton cloth would be incomplete.

SOME OBJECTIONS CONSIDERED.

1.—*Protection raises Prices.*

An import duty is paid by the foreign producer when the country imposing the duty is the sole market for the goods taxed, and secondly, when demand is so very sensitive that even a small rise in price will be followed by a great reduction in the amount sold. The cases, however, in which a country has a monopoly of consumption are rare, and though usually a rise in price diminishes consumption, the burden of import duties is ordinarily shared between the home consumer and the foreign producer. It cannot, therefore, be denied that the effect of protection is to raise

prices to the consumer. But whether a rise in price caused by an import duty will be permanent or not depends upon the nature and amount of the home production. Where the home market is large and conditions for the development of the home industry are favourable, the growth of internal competition may eventually lower prices. Of such a fall in prices under protection several examples are furnished by the tariff history of America. Protection was granted to the tin-plate industry in the United States of America in 1890. Immediately after 1890 the American price exceeded the foreign price by the full amount of the duty. But when imports ceased about 1895, prices were not higher in the United States even by the amount of the lowered duty of 1894. "Some difference in price," says Professor Taussig, "remained, chargeable to the duty, but held in check by competition among the domestic producers, and apparently in process of continuous reduction—a reduction made possible by the decline in the price of crude steel"** About the price of steel rails under protection Professor Taussig says—

"Here again the protectionist will point with pride, and this time with pride more clearly justified. The object of protection to young industries—the ultimate fall in price to the foreign level—seems to have been attained." †

It may also be pointed out that the poorest classes of the Indian population would not

** Some Aspects of the Tariff Question, p 179
 Ibid p 141

much affected by a tariff. The major portion of the income of a poor man in India is spent on food (60 to 70 per cent.). As regards clothing, his consumption of the finer qualities of the imported cotton cloth is very small. This point is often ignored by the advocates of free trade in India. Mr. Coubrrough says :—

“ The recent increase in the import duty on cotton goods has a similar effect, *viz.*, that the consumer has to pay more for the class of goods on which the duty is levied, whether they are imported or whether they are home made. An increase in duty does not necessarily mean a reduction in imports. Trade follows established and natural channels, and the effect of an increase in duty from 3½ to 11 per cent. such as has recently taken place in connection with piece goods cannot immediately cause a diversion of trade from old established channels.”

Mr. Coubrrough objects to protective tariffs also for another reason. He says —

“ The effect of protective tariffs is undoubtedly to increase the profits of manufacturing concerns producing similar goods in the country imposing the duties. To a certain extent such tariffs may be justifiable, in that they enable capital to be accumulated for the development of industries, particularly in countries where a surplus of raw material for their continued development exists. Excessive profits bring trouble in their train. Periods of over-prosperity are followed by periods of riotous speculation, by

* ↑ Notes on Indian Piece-Goods Trade page 10

periods of excessive increase in production and, finally, by periods of severe depression."

It must be admitted that the effect of, say, a 25 per cent. duty on imported cotton goods would be a rise in the prices of such goods and of goods produced by the Indian mills. But the poorest classes of consumers would not be much affected by the rise in prices; the chief sufferers would be the middle and the upper classes. Most of the village people in the Punjab, and this is the case in other provinces also, use coarse cotton cloth, very often home spun. It is generally for festive occasions, or for the head dress, that finer fabrics are used. Again, the growth of the sentiment in favour of Swadeshi cannot be ignored in framing our fiscal policy. So far from being objected to, protection of the cotton industry would be welcomed by the country as a whole as an ally of Swadeshi. It is difficult to think that heavy, though not prohibitive, duties on cotton goods will have no effect in reducing the volume of imports. An increase of duty from 3½ to 11 per cent. may not be sufficient to cause "a diversion of trade from old established channels," but higher duties may well produce that effect. One may also look forward to a great expansion of the home industry under protection. As Mr. Coughrough admits, protection, by increasing the profits of the home producer makes it possible to accumulate capital for the development of industries. There are signs of the accumulation of such capital in the cotton industry. In view of the progress of the Indian iron and steel industry, and of the manufacture of textile machi-

nery and accessories in India, and the availability of abundant supplies of raw material in the country, the field for the expansion of the home industry seems to be practically unlimited. It may be expected that, as in other countries, the growth of internal competition may eventually lower prices, though in the beginning prices will be high. And even if the rise of prices causes hardship to certain classes of the population, the necessary sacrifices must be made with the object of developing productive power and laying the foundations of greater prosperity in the future.

2. *Protection may lead to combination among the protected manufacturers in order to maintain a quasi-monopoly price.*

A combination is not necessarily an evil, though a monopoly is. Combinations are the inevitable products of the modern system of large scale production. They exist in free trade as well as protectionist countries, though it cannot be denied that protection encourages the growth of combinations. But it may be questioned whether combinations formed behind a tariff wall can maintain for a long time a quasi-monopoly price. Professor Tansig says :-

"On the other question also, that of the development of trusts under protection, the free traders have often overstated their case. Surveying the course of events in the three industries for which the connection between protection and combination has been considered, steel rails, tin plate, and sugar refining, the outcome cannot be said to confirm the doctrine that the tariff nur-

tures monopolies permanently. Protective duties, high enough to shut out foreign competition, do tempt to the formation of a combination ; and they do make it easier for the combination, when formed, to raise prices and secure abnormal profits. There is here no small charge in the debit account against protection. But in the long run the situation did alter ; no one of the combinations was able to maintain indefinitely a price raised by the full extent of the duty. Domestic competition did set in, and brought the profits and prices much below the level which full exploitation of the tariff would have caused. Gradually the effect of the protective tariff in supporting combination melted away, and the trust problem presented itself unveiled and bare. Such is likely to be the general drift. The industrial influence of the protective tariff tends to become less and less, but the march of great scale production proceeds apace." *

3. Protection will encourage British firms to establish themselves in India in order to get the benefit of the tariff.

Even without a tariff British firms are erecting, or have decided to erect branch works in India. The industries chiefly affected by this movement are iron and steel, aluminium, copper, cotton textile machinery, motor engineering, steel pipes and tubes, electrical machinery and appliances, cement and paper. A great amount of British capital is already invested in Indian woollen, leather, jute and other industries, and

* *Some Aspects of the Tariff Question*, p. 189

tea and other plantations. From an extremely parochial point of view objection may be taken to the investment of foreign capital in India, but it is evident that it gives employment to Indian labour, and so far as it enlarges the sphere of internal competition, it must tend to lower prices.

4. The growth of power industries under protection will injure the cottage industries.

Hand industries and the cotton handloom industry have a recognised place in our economic system as cottage industries. Cottage industries should be encouraged as they are an important source of livelihood for millions of our people in the villages. But it would be an act of folly to sacrifice industries which use machine power for the sake of the charkha. Nothing can be done to protect the cotton handloom industry against the competition of Bombay mills. The boycott movement has revived hand spinning, and the hand-weavers did well during the war. But as mill production increases, the hand weavers will find it more and more difficult to hold their own against mill competition. There is, however, considerable demand for their products as they make designs which suit local tastes, and there is no reason to fear that they will disappear soon. But whether they disappear or not, the interests of our large manufacturing industries cannot be sacrificed for their sake.

Export Duties

The effect of an export duty is to restrict exports. An export duty is paid by the foreign

consumer when the exporting country has a monopoly of production and the foreign demand is inelastic. But cases of complete monopoly are very few, and it is very often possible to find a substitute for an article whose export is restricted by a tax. Even the foreign demand for our jute cannot be said to be absolutely inelastic—this is shown by the growth in the use of substitutes for jute in Germany during the last five or six years*. There is, however, little harm in imposing export duties on selected articles for revenue purposes. With the exception of an export duty on wheat, the use of export duties for any purpose beyond this cannot be recommended. India is a debtor country,

* The attempts made in Germany during the war to find a satisfactory substitute for jute are described in a publication of the 'Institut für Weltwirtschaft und Seeverkehr' of Kiel University entitled *Zur Frage der Rohstoffversorgung der deutschen Jute Industrie* by Dr Magdalens Wilms 1920. In the pre-war years 1913-14 Germany imported from India raw jute of the value of £4 499 111, and jute manufactures of the value of £201 559. These imports ceased after the outbreak of war. The consequent rise in the price of jute caused some industries to dispense with jute altogether. Cotton, corn and some other products were transported without any jute covering. But this was not possible in all cases and German industrial scientists busied themselves to find suitable Ersatzstoffe or substitutes for jute. Paper and the textile materials flax and hemp were used for making sacks to replace jute sacks. Sacks made from flax and hemp are light and they can be used only in the transportation of valuable products as flour, sugar and food stuffs. The paper sacks are cheap and we are told that 'in consequence of its cheapness paper is destined to be largely used' for this purpose particularly in the cement industry. But the disadvantage of the paper sack is that it can be used only once, which however saves the worry and the cost of returning the empty sacks. The most important substitutes for jute is a kind of textile yarn called

and it is necessary, if she is to remain a solvent country, to preserve an excess of exports over imports at least equal to the amount of the Home Charges. In view of this fact, it would not be wise actively to discourage the exports of raw materials from India for any reason.

Japan, the United States of America, France, Italy, Belgium, Germany and Austria Hungary (before the war) are important purchasers of our raw produce, but, with the exception of jute manufactures, they take very little of our manufactured goods. Only in the case of jute, manufactured exports are of a greater value than those of the raw product. Only in the case of raw jute a duty on exports can be imposed with advantage, if foreign countries impose heavy duties on jute manufactures. The general principle as regards taxes on exports of raw produce may be enunciated that, in view of our debtor

*Textile bags, manufactured from paper and cotton or jute cutting. The manufacture of this year has increased rapidly in Germany so that at the present time the production is already one fifth of the German jute manufacture in the pre-war year 1913. Sacks made from this material are inferior to jute sacks in resisting dampness, but in other respects, particularly durability, they about equal in value to jute sacks, if they do not actually surpass them. To judge of their quality certain experiments were tried. "Sacks filled with cement or with artificial manure were made to fall from a vertical position on a cemented floor from a height of two metres. The results were as follows—

Out of six jute sacks filled with cement, burst
 1 sack after being thrown ten times,
 2 sacks after being thrown down two times

Out of six textile sacks,
 1 sack after being thrown eight times,
 2 sacks after being thrown down three times.

(p. 57, foot-note)

position, it would not be advantageous to tax exports of a raw product unless exports of the manufactured article are of a greater value than those of the raw product.

Imperial Preference.

The chief object of Imperial Preference is to stimulate demand for British goods in India. Fifty years ago the United Kingdom enjoyed practically a monopoly of the Indian import trade, but in recent years, owing to the growth of foreign competition, she is finding it difficult to retain her hold on the Indian market in some branches of the trade. The decline in the demand for British goods in India and other countries is shown by Table B given at the end of this chapter.

Before the war Germany was Great Britain's most formidable commercial rival in India. The war eliminated Germany, but there has been a very considerable increase in the imports from Japan, and the United States during the last six years, the possibility of the revival of German competition, aided by a depreciated currency, cannot also be overlooked. The share of Japan and the United States in our export trade has also increased. The Imperialist would devise "methods whereby the vast stream of India's exports can be utilised to further Imperial interests."¹ He does not object to India developing her manufacturing power to the utmost, but in carrying out such a policy he asks us not to forget that "the interests of Great Britain are

1. "India and the Empire" by M. de P. Webb (1908), p. 89

paramount **. The Imperialist would encourage the export of raw material to Great Britain by imposing preferential duties on our exports (the export duty on hides and skins is an example), and he would certainly do nothing to check British imports into India.

But the first proposition that we can lay down in connection with tariff reform is that tariff changes should be considered primarily with regard to their effect on production and consumption in India. The interests of India are paramount. We have our own industries to develop. From the point of view of the Indian consumer there is little to choose between a protective and a preferential tariff, for preference will raise prices as surely as protection. But while a protective tariff might conceivably assist Indian industries, preference would raise prices to the consumer without conferring any large benefits on the Indian producer.

British competition.

The present writer is definitely of opinion that protection will encourage the development of Indian industries, and that the reform of the Indian tariff should be undertaken with that object in view. But it should be distinctly understood that a protective tariff will help our manufacturers if it protects them not only against foreign but British competition also. As a matter of fact, our industrialists want protection against England more than against Japan, or the United States or Germany, and from their point of view

* *Ibid.* p 159

the distinction made by the advocates of a preferential tariff between foreign and British competition has no meaning. In the case of the cotton industry, the real competition is between Indian mills and Lancashire, and a tariff would be of little use if it checked the imports of Japanese hosiery, but had no effect on the large amount of cotton piece goods imported from the United Kingdom. Our principal imports still come from the United Kingdom, though in some branches of trade Japan and the United States occupy a predominant position in our markets. Out of 71 articles given in Table A at the end of the chapter, in the case of no less than 56, British imports are 40 per cent. or more, of the total imports. Even as regards the remaining 15, excepting matches, cotton hosiery, and buttons, British competition cannot be ignored. It therefore follows that if India is to have a protective tariff, and if protection is really to protect Indian industries, means will have to be devised to restrict British as other imports.

The question of retaliation

The question of a preferential tariff was considered by Lord Curzon's Government in 1903. One of the grounds of Government's unfavourable decision was that the adoption of a preferential tariff by India would lead to retaliation on the part of foreign countries. The articles of which India has a complete monopoly are small in number and, as the Government of India stated in their letter to the Secretary of State (dated October 22, 1903), the greater portion of our

exports "compete successfully in foreign markets by reason of their cheapness rather than of their quality or kind." The articles of which India enjoys a partial or an absolute monopoly are opium, indigo, myrabolans *mohwa*, jute manufactures, teak wood lac and *til*. The value of these exports in 1913-14 was 28.4 per cent. of the total value of exports (19.2 per cent. in 1919-20). The articles in respect of which we enjoy a modified monopoly are rice, hides and skins, oil seeds (excepting *til* and *mohwa*), drugs and spices, and the exports of these articles formed 25.1 per cent. of our total exports in 1913-14 (29.1 per cent. in 1919-20). It thus appears that in regard to about half of our exports (47.5 per cent and 51.7 per cent. in 1913-14 and 1919-20 respectively) we possess no monopoly of any kind, and if jute manufactures are excluded from the list of monopolised articles, the proportion of our exports in respect of which we enjoy no monopoly increases still more (58 per cent. and 67.8 per cent in 1913-14 and 1919-20 respectively). There are thus good reasons for thinking that foreign nations possess some power of retaliation.

The danger of retaliation is not avoided by adopting a protective instead of a preferential tariff, but there is this much to be said for protection that it will not actively discourage exports to foreign countries outside the British Empire, which is one of the chief objects of preference, and that for the risk that we shall be taking, it will materially help in the development of our industries. A preferential tariff will be of very little advantage to our producers as it

will not protect them against British competition, it is certain to inflict loss upon our exporters as it will prevent them from selling their produce in the best market, and it is certain to injure the consumer by checking the imports of Japanese, German and American goods

The Balance of Trade.

Our exports to foreign countries are of a much greater value than imports from foreign countries. In 1919-20 the excess of exports over imports amounted to no less than £ 90,241,000. Before the war, our trade with the British Empire always gave us an adverse balance. During the war, exports to the British Empire increased, but this increase is not such as to encourage the idea that a great part of our export trade can be diverted from foreign countries to countries within the Empire. In view of our debtor position, we cannot afford to neglect the great foreign markets for our exports. If the full programme of Imperial Preference were adopted, with preferential import as well as

The report of the Indian Fiscal Commission has just been published. A brief summary of the report is given below.

On the tariff policy of the Government of India the conclusion of the Commission is stated in the following words:—

"We recommend in the best interests of India the adoption of a policy of protection to be applied with discrimination along the lines indicated in this report. The decision in favour of a policy of protection rather than of free trade is based on a careful analysis of the probable gain and loss in Chapters IV, V and VI. It is shown that the industrial development of India has not been commensurate with the size of the country, its population and its natural resources, and that India will derive great advantages in many directions from a considerable development of Indian industries. It is shown that the exercise of discrimination

tries would decline, and the balance of trade would turn against us.

A Table showing the percentage of British imports to total imports in 1919-20.

Articles	Per cent	Articles	Per cent
Apparel	54	Cycles and accessories	86
Artificial silk piece goods	94	Drugs and medicines	54
Beltng for machinery	88	Dyeing and tanning substances	40
Foots and shoes	41	Earthenware and porcelain	39
Brushes, and brooms	47	Electroplated ware	94
Buttons . . .	9	Flax manufactures	
Candles of all kinds	62	including twist	
Carriages and cart	67	and yarn	80
Cement	87	Furniture and cabi	
Chemicals	77	netware	49
Cigarettes	74	Glass and glassware	18
Clocks and watches	28	Gums and resins	61
Cordage	85	Haberdashery	47
Cork manufactures	71	Hardware	49
Cotton goods inclu- ding twist and yarn	87	Hemp manufactures	35
Cotton hosiery	7	Instruments	53
Cutlery	32	Ivory manufactures	57
		Jewellery	77

(a) That no preference be granted on any article without the approval of the Legislature

(b) That no preference should in any way diminish the protection required by Indian industries

(c) That preference should not involve any appreciable economic loss to India after taking into account the economic gain which India derives from the preference granted her by the Indian Government

Articles	Per cent.	Articles	Per cent
Jute manufactures including twist and yarn	88	Provisions	72
Leather manufactures	75	Railway plant etc	90
Machine y	66	Rubber manufactures	55
Matches	7	Ships parts of	94
Mats and mattings	26	Silk manufactures	
Metals total	68	including twist and yarn	7
Motor cars and motor cycles	19	Smokers requ sites	4
Essential oils	45	Soap	92
Mineral ols	7	Stationery exclud	
Vegetable oils	93	ing paper	61
Oil cloth and floor cloth	63	Sticks whips etc	60
Paints etc	82	Tea chests	49
Paper and pasteboard	41	Telegraphs mate	
Perfumery	55	rials for	62
Pitch tar etc	94	Tel phones mate	
Polishes	86	rials for	64
Printing presses	53	Wool manufacture	
type	86	including twist	
ink	81	and yarn	86
Prints engravings etc	69	Toilet requ sites	42
		Toys etc	19
		Umbrellas etc	48
		Wax of all kinds	15
		Wood manufactures	43

B. Table showing the share of Great Britain, Germany and the United States of America in the world's trade. Extracted from "DER KAMPPF UM DEN WELTMARKT" published by the "Institut für Weltwirtschaft und Seeverkehr" at Kiel.

PERCENTAGES.

	IMPORTS.		EXPORTS.		U. S. A.	
	Percentage share of		Percentage share of			
	Germany	U. S. A.	Germany	U. S. A.		
Russia—1886-90	29.4	23.8	9.3	24.8	32.9	
1913	47.4	12.8	5.8	29.8	0.1	
Denmark—1876-80	37.5	23.7	4.5	32.2	0.9	
1913	38.4	25.8	10.2	40.2	0.2	
Sweden—1871-75	22.9	32.9	2.3	24.9	62.5	
1913	34.2	24.4	9.1	7.1	0.6	
	...	...	...	53.3	2.5
	...	...	...	24.9	4.2

Norway—1876	80	02	02
1913		80	32
Netherlands—1881	85	32	39
1913		22	2
Belgium—1876	80	22	2
1913		20	2
Spain—1897	1900	15	15
1913		15	29
Portugal—1886	90	14	14
1911		26	60
Switzerland—1892	92	29	3
1913		20	12
Italy—1878	80	7	3
1913		18	3
Austria-Hungary—1891	95	17	17
1913		17	17
Balkan—1886	90	17	17
1912		17	17
South America—1901	05	19	17
1913		24	24
Central America—1901	05	10	73
1913		12	70

IMPORTS	EXPORTS	Japan									
		Trade	U.S.A.	Great Britain	Germany	Japan	Trade	U.S.A.	Great Britain	Germany	Japan
		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
		77.9	0.3	1.2	0.0	0.0	49.6	3.5	6.4	0.0	0.0
		76.4	0.7	1.2	0.1	0.1	43.1	3.4	7.8	0.0	0.0
		74.5	1.4	1.1	0.1	0.1	41.3	3.7	9.0	0.0	0.0
		71.8	2.3	1.3	0.1	0.1	37.1	3.8	8.5	1.5	1.5
		70.6	1.8	1.4	0.3	0.3	33.4	4.1	6.3	4.3	4.3
		67.7	1.9	1.4	0.8	0.8	30.2	6.0	6.6	5.6	5.6
		65.1	1.7	1.8	1.2	1.2	26.1	6.9	6.6	5.6	5.6
		63.0	2.7	1.5	2.0	2.0	25.7	8.0	7.0	6.2	7.5
		62.4	1.8	1.5	2.5	2.5	26.0	7.0	6.6	5.6	5.6
		63.0	3.1	1.4	2.5	2.5	25.1	7.8	6.5	7.5	7.5
		64.2	2.6	1.5	2.6	2.6	23.5	8.9	7.2	7.5	7.5
British India											
1871	72-75	76	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1876	77-80	81	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1881	82-85	86	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1886	87-90	91	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1891	92-95	96	2.1	2.1	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1896	97-19	0.01	3.0	3.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9
1901	02-04	0.06	3.6	3.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1906	07-10	11	5.9	6.3	2.7	2.7	2.7	2.7	2.7	2.7	2.7
1911-12			6.5	6.2	4.7	4.7	4.7	4.7	4.7	4.7	4.7
1912-13			6.3	6.3	3.1	3.1	3.1	3.1	3.1	3.1	3.1
1913-14			6.9	6.4	2.6	2.6	2.6	2.6	2.6	2.6	2.6

An Export Duty on Wheat.

The rise of prices operates as a tax on wages. The wage earner tries to shift the tax to his employer, whether he will succeed in doing so depends on many conditions. When the demand for labour is increasing, money wages rise, and part, or even the whole, of the tax on wages is paid by the employer. But if the demand for labour is stationary, the wage earners must bear the tax, unless, rather than accommodate themselves to a lower standard of living, they are willing to reduce their numbers. It is well known that in Western countries a close connection exists between rising and falling money incomes on the one hand and rising and falling marriage rates on the other. In India, however, there is very little connection between the marriage rate and the money income of any class. People here marry as a matter of religious duty; by not marrying, it is thought, one endangers one's prospects of attaining salvation. Rather than take such a serious risk, every body in India marries, and marries early, be he rich or poor. The rise of prices, thus, does not affect the marriage rate in India, and it does not reduce the numbers of any class of wage-earners. It

follows that unless the demand for labour increases, the rise of prices must lower the standard of living of the labourer. He must give up the consumption of the finer qualities of food grains, of *ghee*, milk and other necessaries of efficiency.

Our study of prices in the early days of British rule in the Punjab has shown that the gradual rise in the price of wheat and other food grains was chiefly due to the linking up of the markets in the interior by means of the railway with Karachi and Bombay, which facilitated the export of grain to Europe. The continued rise in the price of wheat in more recent years is also largely due to the same cause, that is the growth of the export trade. Indian wheat does not much compete with wheat grown in Russia, United States, Argentina and other great wheat growing countries; it is required in foreign countries only to supplement deficiencies. "Apart, therefore, from general conditions affecting the supply," says the *Report on the Inquiry into the Rise of Prices*, "exports are subject to violent fluctuations arising out of variations in the supply in other countries. In one year the demand will be very large and, even if the Indian harvest is abundant, prices will rise, in the following year, the foreign demand may be largely reduced owing to abundant supplies from Russia, the United States and other exporting countries, and, even if the harvest in India be deficient, prices might fall. The European demand, therefore, exercises a very important influence on the price of Indian wheat."*

This may be shown by a few examples. In 1891 the wheat harvest in India was exceptionally good, but to meet a strong demand from Europe more than 18 per cent. of its total produce was exported, and prices in India rose. In 1892, in spite of a poor harvest, prices did not rise, thanks to the decline in the European demand. In 1895 the Indian crops were below the normal, but out of the restricted supply a large quantity was exported to foreign countries, and prices rose. In 1901 prices were high on account of famine, but in the following year prices fell owing to a decline in the European demand. From 1904 to 1907 the production of Indian wheat was above the normal, but still prices rose steadily in sympathy with the rise in foreign prices. Of the rise in prices in 1910 and the following two or three years the same explanation is to be given. "The price of wheat in India has, with some occasional falls been rising in recent years, notwithstanding the increase in the supply available for internal consumption. This is explained by the rise in world markets."^{*}

It thus appears that one of the most important causes of the rise in the price of wheat in India is the increase in the external demand for wheat. It is important to remember that while the percentage of exports to the total production in the case of rice and food grains in general is small, in the case of wheat it is considerable.

The wheat exported is described as a 'surplus,' but it is not a surplus in the sense that consumers

* *Ibid.*, p. 116

of wheat in India do not want it. In good years India produces, on an average, about ten million tons of wheat; allowing for an export varying between $1\frac{1}{2}$ to $2\frac{1}{2}$ million tons, we have 8,500,000 to 7,500,000 tons left for internal use, including say, 1,000,000 tons for seed for the next year's crop.* It is estimated that one ton of wheat, making all necessary allowances, will feed on the average five persons for a year. Thus 6,500,000 to 7,500,000 tons will feed a population of less than 40,000,000 in a year. But the wheat eating population of India is estimated to be more than 100,000,000 persons.* The wheat exported is therefore not a surplus in the sense that there is no demand for it in India. Poor people, however, finding that the price of wheat is high and they cannot afford to buy it, substitute coarser grains for it in their consumption. The higher the price of wheat, the greater is the inability of poor people to buy it, and the greater is the amount of the "surplus". That the wheat exported from India is not a surplus in the real sense, that is, a surplus over and above the requirements of the people, is also shown by the fact that the amount of the "surplus" varies from year to year according to the varying demand of foreign countries.

The problem of controlling the price of wheat and the coarser grains in India is really the problem of regulating the amount of this "surplus". In no other way can price be controlled. When

* For these figures I am indebted to Mr. W. H. Moreland's article on "The War and Indian Wheat" in the *Quarterly Review* for July 1915.

Lahore was under Martial Law in 1919, an attempt was made to fix the price of wheat by authority, and the result was that for a few days there was no wheat to be had in the city for love or money. It would be infinitely more difficult to fix prices in every part of India and to make people buy and sell at those prices. If, however, by means of an export duty, the Indian cultivator is discouraged from selling his wheat in the foreign market, the supply of wheat retained in the country will increase and prices will fall. The duty should not be fixed in amount, but vary according to a sliding scale, the amount of the duty being determined from time to time with reference to the course of wheat prices in India and foreign countries.

The question of an export duty on food grains generally was considered by the Prices Inquiry Committee of 1910. Of the five arguments against an export duty given below the first four are those advanced by the Prices Committee, and the fifth by Mr. W. H. Moreland.*

(1). "The export trade clearly encourages production and creates the reserve which is drawn upon in times of scarcity. This reserve actually tends to prevent prices rising to the extent that they would otherwise do."

(2). "The effect of foreign trade generally is to steady prices in India of the commodities entering into international commerce, preventing them from falling to a level lower than that at which the commodities can be profitably exported or from rising to a level higher than that at which they can be profitably imported. The variations

in prices are, thus, greatest in those commodities which are not affected by European trade, e.g., jowar, bajra, ragi, etc."

(3). If prices fell "it would no longer be profitable to cultivate the inferior lands, which would then soon go out of cultivation, and there would be a permanent decrease in the produce of food-grains in India, and in consequence a rise in the prices."

(4) "If a prohibitive export duty were to be levied in good years, the stocks of grains would accumulate and grain prices would fall. The cultivators who form about two-thirds of the population of India would be poorer by the difference between the price that would prevail after the imposition of the prohibitive export duty and that which they would have otherwise obtained."

(5) A decrease in exports, caused by an export duty, according to Mr. Moreland, "might so far affect the balance of trade as to threaten the security of the gold standard of currency, now the corner-stone of India's financial policy."

It should be noted that it is admitted that the curtailment of the exports of food grains in good years would lower their prices. On this point Mr. Moreland says:—

"If the action of the State stopped with the prohibition of exports, the situation would be clear. Within the country there would be a large surplus of food, and there would be no means of getting rid of it. Prices would, there-

fore, fall substantially; and cheap, perhaps very cheap, food would be assured to the people."

An export duty on food grains is opposed, not because it would not achieve its purpose, but because it is thought that the sum total of the disadvantages arising from it would exceed the sum total of the advantages. We may now deal with the arguments against the export duty one by one.

(1) It must be admitted that, chiefly owing to the export trade, the production of food grains in India has increased. In a normal year more is produced now than forty or fifty years ago, when the amount of food grains exported was small. In this sense the export trade may be said to have created a reserve which we can draw upon in times of scarcity. But chiefly owing to the export trade again, in spite of the increase in the area under cultivation and in the production of food grains, the prices of food grains, in years of good rainfall, are now generally higher than they were formerly in famine years, and in years of scarcity they rise still further. For example, the annual average price of wheat for the Punjab and N. W. F. Province, from 1861 to 1870, was never less than 12 seers for a rupee, except in one year, 1869, when it was 11.99 seers; during 1871-1880 the average was never less than 13 seers, except in 1879 when it fell to 12.92 seers; during 1881-1890 it was less than 15 seers only in 1887 when it was 14.89 seers; during 1891-1900 it fell to 10.42 seers in 1900, but it was higher in other years. The average, which was fairly high from 1900 to 1915, fell in the latter year to

8·8 seers per rupee. In December 1917, the price of wheat in the Punjab was 8·1 seers per rupee, in December 1918, 6·4 seers and in January 1921, about 4 seers. How is it that in spite of the reserve which the export trade has undoubtedly created, the price of wheat in recent years has been much higher than it ever was? It is not because the internal demand for food has increased more rapidly than the food supply. In part, of course, the high prices of wheat and the coarser grains are due to the general depreciation of the rupee, and even if the export of food grains were totally prohibited, prices would not fall to the level of, say, 50 years ago. But this is so in part only. Cutoffment of imports, as is admitted, would lower prices.

It cannot be denied that if the "reserve," which is drawn upon in times of scarcity, and which the export trade has created, entirely disappeared, prices would rise. But, as is argued below, it is not necessary that the imposition of such a duty as has been suggested, should have that effect.

(2) The fluctuations in the prices of inferior food grains which are not largely exported are greater than those in the price of wheat. But we should not forget that the effect of the European demand for wheat has been a steady and continuous rise in its price. It may be doubted whether a steadily rising price is a lesser evil than a fluctuating price, which, however yields a lower average. Again, it should be recognised that the European demand for wheat indirectly affects the prices of the inferior food grains.

"Through the wide-spread operations of this (export) trade" says Mr. Moreland "the price of wheat all over India has gradually been brought into relation with the rates prevailing in the European markets; and since wheat is interchangeable in consumption with most of the other grains—maize, barley, and the various millets and pulses—produced and consumed in India, the export price of wheat is a governing factor in the prices of food grains throughout the country, so long as there is a surplus at all."

(3) It is certain that if a prohibitive export duty were imposed on food grains, prices would fall, and it is probable that some inferior lands would go out of cultivation. But the total prohibition of wheat export is not suggested here. Whether the shrinkage of supply caused by an export duty which discouraged exports without stopping them altogether would be great or small would depend upon the nature of marginal production. Suppose the yield of the inferior lands is small as compared with that of lands of superior productivity, or in other words, that the amount of the marginal production is small. In such a case the decrease in the total production of food grains would be small, and prices may not rise. In order to prove that the imposition of the export duty would lead to a permanent decrease in the production of food grains and a rise in prices, it is necessary to show that a large amount of food grains is raised on or near the margin of production, we cannot assume that. The export duty proposed may only somewhat diminish the gains of large farmers without much

reducing the total quantity of wheat produced. If it is found that there is still a tendency to divert land from wheat production to the cultivation of cotton, it might become necessary to tax cotton also. Such a tax would be welcomed by our growing cotton industry, and in its ultimate effect, it would tend to lower the price of cotton cloth.

(4) The fall in prices, it is said, would injure the cultivators "who form about two-thirds of the population of India." This argument is important. India is an agricultural country; if the fall in the prices of food grains would injure a large majority of the population, those who argue against an export duty on food grains, it must be admitted, have some sort of a case. But as a matter of fact, cultivators do not form two thirds of the population of India, and those who are benefited by the rise in the prices of food grains are not a majority but in all probability, a minority of the population. According to the census of 1911, out of a population of 313,470,000, the number of those engaged in "ordinary cultivation" was 216,787,000, or 69 per cent. The sub-classes under this head were as follows —

(1) Income from rent of agricultural land	7,7743,000 or 2.5 per cent.
(2) Ordinary cultivators	167,015,000 or 53.2 per cent.

(3) Agents, managers of landed estates (not planters), clerks, rent collectors, etc	781,000 or 2 per cent.
(4) Farm servants and field labourers	41,246,000 or 13·1 per cent.

We thus learn that all those who are described as engaged in 'ordinary cultivation' are not 'ordinary cultivators.' The rise in prices does not benefit the rent receivers unless they can enhance their rents faster, and to a greater extent, than the rise in prices. Among the classes which have been adversely affected by the rise of prices M₁ Datta includes "the great Zemindars and other landlords of Bengal, Oudh and other parts of India who can enhance their tenants' rents only at considerable intervals, and who, therefore cannot adjust their rents to meet the change in prices." Nor are agents, managers of landed estates, clerks and rent collectors benefited by the rise of prices, unless their wages increase more rapidly than prices. As regards farm servants and field labourers, again, their real wages must fall if their money wages lag behind prices. It is thus shown that the rise in the prices of food grains does not necessarily benefit classes (1), (3) and (4).

We thus reach the conclusion that the rise in the prices of food grains can conceivably benefit, directly, 53·2 per cent. of the population.

But India being a land of small farmers, it is probable that the percentage of the cultivators who actually gain by the rise of prices to the total population, is not 53.2 but much less. It is not improbable that the farmers who have been enriched by the rise of prices are a small minority of the population.

(5) The following table shows the value of the total exports of Indian merchandise, of the exports of grain, pulse and flour, and of wheat, from 1909-10 to 1913-14. Pre-war years have been taken as exports and imports during the war were not normal.

Table.

AV EXPORT DUTY ON WHEAT

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Exports from India.

	1909-10 £1,000	1910-11 £1,000	1911-12 £1,000	1912-13 £1,000	1913-14 £1,000
1. Exports of Indian merchandise	122,297	137,060	147,670	160,699	162,800
2. Exports of grain and flour	22,384	29,716	34,300	40,201	30,099
3. Wheat	8,472	6,638	8,698	11,795	8,765
Percentage of (3) to (1)	7.0	6.3	6	6	5.4

The table shows that the exports of grain, pulse, and flour form a considerable proportion of the total exports of Indian merchandise to foreign countries. If the export of food grains ceased altogether, it is probable that the balance of trade would be affected. But no one proposes that the export trade in food grains should be stopped altogether. What is suggested is that the amount of wheat annually exported should be regulated in the interests of the Indian consumer by means of an export duty. As the price of wheat governs the prices of inferior food grains, a reduction in the quantity of wheat exported would lower not only the price of wheat but also the prices of other food grain. The exports of wheat as compared with the total exports of Indian merchandise are small—on an average 6.5 per cent—a decrease in the exports of wheat would not turn the balance of trade against India.

It is sometimes suggested that the true solution of the wheat problem lies not in lowering the price of food but in raising the level of incomes. But, as is well known, wages have a tendency to lag behind prices. Industrial wages have risen during the last four or five years, but by a very slow and painful process. And one may still doubt whether the process of adjustment is complete. We should also remember that while trade unions have done a good deal to ameliorate the condition of the town labourer, the movement is yet in its infancy, and that our agricultural labour is not organised at all, and has very little chance of becoming orga-

bised in the near future, since it is spread over the broad face of the land and is not concentrated in small areas like factory labour. In view of these incontestable facts, and of our experience in the past, it may be concluded that it is not possible for the level of incomes in India to rise to a point where the high price of food will become a matter of indifference to the consumer.

Some people think that the rise in the price of wheat is entirely due to the depreciation of the currency, and they suggest deflation as a remedy for the evil. Our currency like the currencies of most European countries, is inflated, and if the volume of the currency could be somehow reduced, general prices would fall. But it cannot be said with any degree of confidence that deflation would lower the price of wheat. It may be admitted that important changes in the amount of the circulation cause general movements of prices, but the prices of particular goods are all the time subject to special influences connected with their supply and demand. This is particularly true with regard to commodities which are exported and imported. For example, the effect of deflation on the price of wheat in India may be more than counteracted by a rise in the price of wheat in countries outside India, causing a considerable proportion of our wheat to be exported. The price of wheat in India, in these circumstances, would not fall; it may even rise, in spite of deflation, in sympathy with European prices. To lower the prices of goods which largely enter into foreign trade you must either bring about a fall in foreign prices, which is beyond your power,

or sever the link of connection between your price level and the foreign price level by restricting exports.

Is increased production a remedy against the high price of wheat? The answer is in the affirmative provided that increase in production is not accompanied by an increase in exports. If increased production is for the benefit of the foreign market, that is, as production increases, the export trade expands, the home consumer will gain little by it. This point is important. During the last forty years the area under wheat as well as the yield of wheat in India has considerably increased. As compared with 1891-92 there was in 1916-17 an increase of 24 per cent. in the area under wheat in the whole of India and 56 per cent. in the area under wheat in the Punjab. There is ample evidence of increase in the production of wheat, and yet, in spite of increased production, the price of wheat in years of good rainfall during the last four or five years has been higher than it ever was in the severest famine which the oldest man in the Punjab can remember. Some part of this rise in the price of wheat is of course, due to the general fall in the purchasing power of the rupee. Increase in population has absorbed some part of the increase in production, but, as we have seen, it cannot be denied that the most important cause of the rise in the price of wheat during the last 40 years has been the growth of the export trade which has linked the price of wheat in India with the European price, and which makes it rise and fall as the European price rises and falls. Statistics show that growth of food supply in India has been commensurate with the growth of population. The rise in food prices therefore, must be due to

the growth of the external demand. It may further be pointed out that the political and economic condition of the wheat producing countries of Europe is still disturbed, and that it is probable that the European price of wheat will continue to be high for several years. In these circumstances, unless we break the link which connects the Indian price of wheat with the European price, we must be prepared for a further rise of prices in India, in fact no limit can be fixed for the rise in the immediate future.

The advocates of unrestricted export of food stuffs insist that the fall of prices would injure the cultivator as he would have to sell a larger proportion of his crop in order to pay the land revenue, and they point out that the tax on agricultural incomes (*i. e.* the land revenue) is already too heavy. It may be frankly admitted that the land revenue, if we regard it as a tax at all, is a very peculiar tax. It does not conform to the accepted canons of taxation in Western countries, but it is based on immemorial custom in India. Whatever be the view regarding the relation of the State to land under existing conditions, it cannot be doubted that in the past, under Indian rulers, the State claimed to be the universal landlord and enforced its claim by demanding a share of the gross produce of the soil. The State's share in the profits of cultivation is much less now than what it ever was. The Laws of Manu permitted the king to take "the eighth, sixth, or twelfth part of the crops" (VII. 130), while a Kshatriya king who, in times of distress, took even the fourth part of the crops was not blamed (X. 120). There is a

reference in Kautilya's *Arthashastra* to "taxes that are paid in the form of one sixth of produce" (*shathbhag*).* The Mohammedan rulers of India sometimes took as much as one-half of the gross produce of the land. Ala ud-deen Khilji, for example, according to Ferishta, "ordered a tax, equal to half the gross annual produce of the lands, to be levied throughout the Kingdom, and to be regularly transmitted to the exchequer" † Akbar, the most enlightened Mohammedan ruler of India, "fixed his claim at one third of the gross produce, and in order to realise the revenue on this basis, his officials determined the average yield of every crop grown in the country, and fixed cash rates representing one third of this average yield valued on the results of ten years' experience".‡ Whether the State's share in the profits of cultivation at the present time is equal to one-twentieth§ of the average value of the crops or more or less, it cannot be denied that it is far less than what it was in the past. The land revenue must not be judged by Western standards. It is a product of Indian conditions, and it must be considered in relation to Indian custom, tradition and practice. Thus regarded the Indian cultivator is more lightly taxed than he ever was, and he cannot make a grievance of it.

Finally it may be said that it is altogether wrong to think that the income of our large agri-

* Trs by Shamashtry, p 112

† Trs by Brigg, Vol I p 346

‡ *India at the Death of Akbar* by Moreland, p 99

§ *The Wealth and Welfare of the Punjab* by H Calvert p 198

cultural population cannot be increased "otherwise than by an increase in the price of produce." The rise of prices is the least important means of improving the condition of the agricultural classes. We have to remember that, in the long run, some part of the increased profits of cultivation due to rising prices must get absorbed by the increase in the cost of cultivation, and secondly, that a great part of the profits may not be enjoyed by the cultivator but may, as they actually do, find their way into the pockets of the middleman, the exporter and the *mahajan*.

Every one knows that the development of irrigation has added very materially to the wealth of the Punjab during the last twenty years. Extension of irrigation and the progress of scientific, large-scale farming which would increase the yield of the land per acre, are the only true foundations of agricultural prosperity, whether prices rise or not. The Indian farmer is poor because his holding is small, and because his methods of cultivation are primitive. The consolidation of holdings, the adoption of improved methods of cultivation and the organisation of rural credit by means of co-operative societies will increase agricultural incomes by increasing production, even if prices fall.

Even if we admit, for the sake of argument, that agricultural incomes cannot be increased otherwise than by increase in prices, it does not follow that prices should be allowed to rise to any extent so that the profits of agriculture may increase. Surely the majority has a right to live. The urban unskilled labourer has also wife and

children. He is also a member of the community. It is certainly true that "there can be no health in the cities without corresponding health in the country," but an industrious, prosperous and contented city population is also essential to the progress of rural life. There is no real conflict of interests between the town and the country, and the economic interests of the two are so closely intertwined that what injures the one must injure the other

I.—Table showing the retail prices of *sool* grains in the Punjab (in seers and leucimals of a seer per rupee) from 1861-1910

Year	Wheat	Barley	Jawar	Bapra	Gram	Maizo	Average of the coarser grains
1861	17 5	24 8	22 1	22 9	19 7	20 7	22 4
1862	27 0	45 2	36 4	32 4	33 7	38 9	37 3
1863	30 0	48 9	43 7	38 3	41 1	45 7	48 5
1864	27 5	42 5	33 3	29 2	34 8	38 5	35 3
1865	21 7	34 7	29 1	26 3	30 1	34 8	31 0
1866	22 8	35 7	29 3	24 9	30 1	40 1	32 0
1867	21 1	29 2	26 7	23 0	23 9	28 0	26 4
1868	16 2	23 6	17 8	16 5	18 3	17 9	18 9
1869	12 0	18 0	15 6	13 3	11 0	19 5	15 5
1870	15 8	23 0	23 8	19 3	16 6	16 0	22 2
1871	21 0	31 9	29 3	22 8	22 4	26 0	26 0
1872	20 4	29 8	23 0	22 0	21 2	24 3	24 3
1873	22 2	33 5	30 4	28 2	27 9	29 9	29 9
1874	23 0	33 6	27 0	24 9	32 1	29 0	29 0

Years	Wheat.	Barley.	Jawar.	Bajra.	Gram.	Maize.	Average of the coarser grains.
1875	24.8	35.5	30.7	29.1	82.0	32.3	32.3
1876	26.0	38.4	35.2	31.0	35.7	34.8	34.8
1877	23.8	36.6	31.3	28.5	31.8	32.0	32.0
1878	16.0	24.0	16.7	15.8	16.2	18.0	18.0
1879	12.9	18.1	15.7	15.3	15.0	16.3	16.3
1880	14.6	21.7	21.2	17.9	15.1	19.7	19.7
1881	17.8	26.3	22.2	18.9	21.1	22.1	22.1
1882	21.8	34.1	30.1	24.3	27.0	28.9	28.9
1883	22.2	35.9	38.8	29.9	30.8	32.6	32.6
1884	24.3	36.2	33.1	26.7	32.2	32.7	32.7
1885	24.9	36.5	38.0	30.4	32.4	34.2	33.9
1886	19.5	32.4	25.8	22.0	28.9	25.1	26.7
1887	14.7	21.3	17.5	15.9	21.0	18.0	18.9
1888	15.6	21.5	19.5	16.6	20.5	18.0	19.2
1889	19.6	30.4	25.6	22.3	25.6	26.6	26.2
	..						

Years	Wheat	Barley	Jawai	Bajra	Giam	Maine	Average of the coarser grains
1890	18.2	27.9	24.2	21.4	22.5	24.0	23.7
1891	14.9	22.5	17.8	16.3	19.8	17.8	18.7
1892	13.9	20.7	19.5	15.9	20.2	18.2	18.9
1893	10.4	26.4	24.4	19.8	25.7	19.4	23.1
1894	24.2	39.0	31.4	23.6	34.5	31.3	32.0
1895	19.1	28.7	24.4	20.6	25.2	24.0	24.6
1896	12.0	16.5	14.8	12.7	15.6	15.6	15.0
1897	10.4	13.5	11.8	10.4	10.5	11.9	11.6
1898	16.4	25.5	22.0	19.6	19.1	23.2	21.9
1899	15.8	22.2	19.8	17.1	17.4	21.1	19.7
1900	17.8	15.1	12.4	11.9	11.6	13.9	13.0
1901	15.2	23.8	21.8	20.1	18.3	21.7	21.0
1902	15.8	22.3	21.6	17.8	19.0	20.6	20.7
1903	16.3	21.9	21.8	18.6	20.9	22.2	21.0
1904	17.7	30.4	28.7	23.0	26.0	28.2	27.3

Years	Wheat.	Bailey.	Jawai.	Bajia.	Gram	Maize.	Average of the coarser grains.
1905	15.6	27.3	21.4	18.3	20.5	22.2	21.9
1906	14.6	21.4	15.5	14.0	16.9	17.0	17.2
1907	13.6	31.2	18.7	17.1	16.5	19.0	18.5
1908	9.6	14.4	11.4	10.6	10.3	12.6	12.3
1909	10.1	17.2	15.5	16.2	13.6	14.8	15.1
1910	12.8	22.6	17.5	16.1	18.2	19.1	18.7
1911	13.9	21.8	17.9	15.7	18.7	19.0	18.7
1912	12.2	17.4	13.4	13.4	15.3	15.5	14.8
1913	11.4	16.1	15.4	12.6	14.4	15.3	14.8
1914	10.5	16.8	12.3	11.2	11.7	12.9	12.9
1915	8.8	15.9	10.7	10.9	11.8	10.7	11.0
1916	..	10.3	15.2	12.8	10.9	12.1	14.3
1917	..	9.5	13.8	12.0	13.0	11.7	12.9
1918	..	7.9	11.3	7.2	8.4	9.9	9.6
1919	6.5	8.3	6.0	5.6	7.0	8.4	7.3
1920	..	7.1	10.4	8.0	7.3	8.0	8.4

II

Years	Export of wheat (including wheat flour) in thousands of cwts	Years.	Export of wheat (including wheat flour) in thousands of cwts
1870-71	248	1895-96	10,891
1871-72	637	1896-97	2,695
1872-73	394	1897-98	3,085
1873-74	1,755	1898-99	20,453
1874-75	1,069	1899-00	10,495
1875-76	2,498	1900-01	765
1876-77	5,583	1901-02	8,079
1877-78	6,540	1902-03	11,266
1878-79	1,344	1903-04	27,058
1879-80	2,195	1904-05	44,355
1880-81	7,444	1905-06	19,923
1881-82	19,863	1906-07	17,188
1882-83	14,144	1907-08	18,690
1883-84	20,956	1908-09	3,008
1884-85	15,830	1909-10	22,010
1885-86	21,060	1910-11	26,489
1886-87	22,263	1911-12	28,658
1887-88	13,538	1912-13	34,573
1888-89	17,610	1913-14	25,632
1889-90	13,799	1914-15	15,206
1890-91	14,791	1915-16	14,229
1891-92	31,044	1916-17	16,381
1892-93	15,714	1917-18	30,518
1893-94	12,901	1918-19	10,140
1894-95	7,647		

Indian Labour.

The war was a period of great industrial unrest in India and this unrest still continues. The causes of unrest have very often been mis-understood. It is taken to be a sign of the spread of Bolshevik doctrines among the labouring masses of India. It is supposed to be the work of the agitator, of the lawyer politician. The agitator, however, is not responsible for industrial unrest. Its main causes are economic. Even before the war the Indian factory labourer was living from hand to mouth. The great rise of prices during the war, which was not accompanied by a corresponding increase in money wages, made his economic position worse. The cost of living as measured by changes in the prices of the necessaries of existence rose 83 per cent. in January 1919 as compared with the average of July 1914. The average increase of wages in various industries between 1914 and 1919 is summarised below :—

Cotton spinning and weaving 54% including 35% temporary war allowance.
industry.

Cawnpore woollen industry ... 19%

Coal-mining industry, Bengal 16%

Tea industry, Assam ... 19%

Jute industry, Bengal ... 13%

Railway Locomotive Work.

shops, Punjab ... 39%

Engineering Worksshops,

United Provinces ... 28%,

Army Boot Factory, Cawnpore 19%

Paper industry, Bengal ... No change.

Brewing industry, Punjab ... 30%

Rice industry, Rangoon No change.

The average of these increases is 21½%. In view of the much greater rise in the cost of living, the outbreak of a series of strikes in 1920 affecting almost all industries is not surprising. About the causes of industrial unrest in Bengal the Director of industries, Bengal says:—

“An epidemic of strikes unprecedented in the history of the province broke out in Bengal in the year 1920. With extremely few exceptions, the strikes arose from demands for higher wages; and the general origin of the demands was the rise in the cost of living which resulted from the Great War. The popular hope that the Armistice would be followed by a substantial fall in prices was grievously disappointed; apart from economic reasons there were others that unsettled men's views of established things, and the general atmosphere was one that encouraged

the not unnatural demand of industrial labour that some readjustment should be effected. The strike as a means of obtaining concessions was not unknown before 1920, but it had appeared only in isolated cases, and the demands had more commonly been non-economic in character. What appears to have occurred in 1920 is that isolated strikes for higher wages in the Hoogly riverine, resulting in the concession of increases, were suddenly taken as a pattern of what might well be repeated, and there followed a process of accumulative imitation which gained in strength owing to the continued success achieved. This process was lubricated by public discussion in newspapers and by the active interest which was taken in some strikes by publicists not belonging to the working classes, who began to express on behalf of the men arguments regarding labour which had hitherto been heard more often in Western countries than in India. Up to date, the process of adjustment has been on the whole amicable, the bulk of strikes have been comparatively short-lived, and their conduct has been commendably peaceable. In the course of them several tentative movements in the direction of forming economic labour associations have made their appearance; these are, however, mostly confined to smaller groups of employment such as press-employees, and do not extend for instance, to the great jute industry."

It cannot be denied that as the result of strikes workers in many industries have been able to obtain a considerable increase in wages during the last two years. Industrial wages rose from

60 to 100 per cent. in 1921. The rise in wages in Bombay, particularly, about 100 per cent., is very satisfactory.

The work of ascertaining exactly changes in the cost of living of the labouring population has been undertaken by the General Labour Bureau of the Government of India and also by the labour departments of certain provinces. The following table shows the rise in the cost of living in India and in some foreign countries :—

[Table

*Cost of living index numbers for India and some foreign countries **

	India (Bombay)	U. Kingdom	France	Germany	U. S. of America
July 1914	100	100	100	100	100
1920	189	252		842	217
1921					
January	169	265		944	
February	162	251		901	
March	160	241	338	901	
April	160	233		894	
May	167	228		880	180
June	173	219	207	896	
July	177	219		1,124	
August	180	222			
September	185	220	295		177
October	183	210		1,308	
November	182	203		1,594	
December	179	199	297	1,746	174
1922					
January	173	192		1,825	
February	165	168		2,209	
March	165	186	291	2,630	167
April	162	182		3,175	
May	163	181		3,462	
June	163	180	317		
July	165	184			
August		181			

* Labour Gazette for August, 1922.

It will be seen that the cost of living fell appreciably after October 1920. Considering the substantial rise in wages in 1921, it would seem that the lot of our industrial workers has materially improved. The process of adjustment, however, still continues and, as the reports of strikes in many industries show, the Indian labourer has not yet settled down to work.

Information regarding industrial disputes in India in each quarter of the year 1921 is published in the *Journal of Indian Industries and Labour*. An examination of relevant statistics yields the following results —

Number and Result of Industrial Disputes

Year 1921.	Number of Disputes	Successful	Partially successful.	Unsuccessful
1st Quarter	116	13	42	43
2nd "	64	11	12	27
3rd "	88	15	12	45
4th "	132	49	16	54
Total	400	88	82	168

A strike is shown as successful when the demands of the workers are conceded in full; as a failure, when they obtain no concessions. However, many strikes classified as "partially successful" should be regarded in fact as

"successful," far in most cases, the workers when they strike for pay demand more than what they intend to secure.

It will be seen that, except in the last quarter of the year, the number of "unsuccessful" strikes was considerable. Of the 49 "successful" strikes in the last quarter of 1921, no less than 47 occurred in Bombay, mainly in connection with the bonus question. If we deduct the Bombay figures from the total number of successful strikes, it is found that 2 other trade disputes were successful as against 16 partially successful and 54 unsuccessful.

Causes of trade disputes.

Year 1921.	of Number Disputes.	Pay.	Bonus.	Personnel.	Leave and Hous.	Others.	Not Known.
1st quarter	116	64	17	14	3	18	..
2nd "	64	36	6	12	2	7	1
3rd "	88	34	3	15	4	29	3
4th "	132	40	49	22	1	18	2
Total	400	174	75	63	10	72	6

The term "personnel" includes all strikes where the chief object was the reinstatement or dismissal of an employee.

It will be seen that the largest number of disputes were caused by the demand for higher pay or bonus.

Industries affected.

Year 1921.	Number of Disputes.	Textile.			Non-Textile.
		Cotton.	Jute.	Total.	
1st quarter	116	27	9	36	80
2nd ,,"	64	21	5	26	33
3rd ,,"	88	33	4	37	51
4th ,,"	132	72	10	82	50
Total	400	153	28	181	219

Numbers involved.

Year 1921.	Textile.			Non-Textile.	Total.
	Cotton.	Jute	Total.		
1st Quarter	35434	38300	73734	111517	185251
2nd ,,"	26997	48000	74997	47435	122432
3rd ,,"	53616	15400	69016	28809	97825
4th ,,"	44356	33025	77381	40266	117647
Total	160403	134725	295128	228037	523155

The figures show that about half the number of trade disputes occurred in the textile industries, cotton and jute, involving more than half the total number of strikers.

The occurrence of as many as 400 strikes in one year shows that our industrial workers are capable of taking concerted action in order to protect their interests. This augurs well for the formation of regular unions of workers in various industries. At the present time, however, while the Indian employers are well organised, organised unions of workingmen are practically non-existent. A resolution was moved in the Indian Legislative Assembly by Mr. N. M. Joshi, the leading champion of labour in the representative chamber, on 1st March 1931, recommending the introduction "at an early date, in the Indian Legislature, of such legislation as may be necessary for the registration of trade unions". Sir Thomas Holland speaking on behalf of the Government, pointed out that the number of trade unions which could be registered was so small as to be negligible. "It is all very well," he said "to urge the Governor General to take steps to introduce *at an early date* the legislation necessary for the registration of trade unions. What we want first of all to know is how many real trade unions exist in India. There are some associations it is true, in this country, but possibly they could be counted on the fingers of one hand, that have a clearly stated constitution and a recognised membership, with audited accounts". He suggested that for the words "at an early date" in the Resolution the words "as soon as practicable" should be substituted, and the Resolution was accordingly amended and accepted by the Government.

In view of the ignorance and illiteracy of our

workers it may be said that the formation of trade unions in India would be a slow process. In the interests of the workers themselves, however, it is highly desirable that trade unions with properly appointed leaders, who should be able to represent the cause of the labourers and negotiate with the employers, should be formed in every industry as early as possible.

The progress of the labour movement is being carefully studied by Government. Government have been compelled to take a direct interest in labour questions for two reasons. In the first place, the widespread outbreak of strikes all over the country caused great inconvenience to trade. The loss and inconvenience caused to the public at large, and traders and manufacturers in particular, by a well-organised railway or postal strike can be easily imagined. Again, a strike in India, under certain conditions, is likely to acquire a political importance, though its causes may be economic. In the second place, India as a member of the League of Nations was represented at the first International Labour Conference held at Washington in the autumn of 1919 and early in 1920, and the Government of India, as a member of the International Conference, have to take appropriate action on the resolutions of the Conference.

With the object of collecting accurate statistical data relating to labour and industries, the Census authorities were asked to include in their enquiries questions about industries and how they are carried on, and information about the

operatives, their sex, age, etc. A Central Labour Bureau under a Director has been created, and the Bureau has already done much in the way of collection of statistics and the publication of useful monographs on labour and industrial problems. As regards the settlement of labour disputes, some Local Governments have taken action in constituting Boards of Conciliation or Arbitration. Statistics regarding the cost of living and wages and reports on strikes are submitted by the Provinces to the Central Labour Bureau, and arrangements are also being made in the Provinces for the systematic collection of information relating to these questions through regular organisations.

The Indian delegation at the Washington Conference consisted of two officials, one employers' delegate, Mr. (now Sir) A. R. Murray, C. B. E., Chairman of the Indian Jute Mills Association, and one workers' delegate, Mr N. M. Joshi, Secretary Social Service League, Bombay. The Conference adopted draft conventions concerning hours of work, unemployment, the employment of women before and after childbirth and during the night, the minimum age for admission of children to industrial employment and the night work of young persons employed in industry. The recommendations of the Conference related to unemployment, the protection of women and children against lead poisoning, reciprocity of treatment in the case of foreign workers, prevention of anthrax, the establishment of Government Health Services and the application of the Berne Convention of 1906 on the prohibition of the use of white phosphorus in the manufacture of matches.

The Washington Conference adopted the following Draft Convention regarding the hours of work in industrial undertakings —

ARTICLE 2

"The working hours of persons in any public or private industrial undertaking or in any branch thereof, other than an undertaking in which the members of the same family are employed shall not exceed eight in the day and forty eight in the week, with the exceptions hereinafter provided for"

It was recognised by the Conference that this Convention could not be applied to India and some other Eastern countries. The question of the hours of labour in India was considered by a Committee of the Conference. This Committee recommended the adoption by India of the principle of a 60 hour week and the limitation, at an early date, of the hours of underground work in mines to 54 or even lower.

The revision of the Indian Factories Act of 1911 was undertaken with a view to giving effect to the decisions of the Washington Conference which had been accepted by the Indian Legislative Assembly.

The amended Act came into force on July 1, 1922.

Industrial Disputes during the

Provinces.

		Number of disputes	Numbers involved	Days lost.
Assam	...	1	2,000	2,000
Bengal	...	39	58,258	253,727
Behar and Orissa	...	3	4,050	80,300
Bombay	...	76	38,550	213,844
Burma	...	6	718	23,783
Central Provinces	...	2	712	14,464
Madras	..	3	11,890	203,040
Punjab	..	1	300	5,700
United Provinces	...	1	1,169	2,338
<i>Total</i>	...	132	117,647	799,196
<i>Industry</i>				
Cotton Mill	..	72	44,356	418,640
Jute Mills	.	10	33,025	87,375
Engineering Works	.	4	6,570	30,100
Railways (including Rail- way Workshops)		6	8,725	20,650
Tramways	.	2	2,500	67,500
Collieries	.	18	6,500	42,500
Motor Works	.	2	206	1,128
Rice Mills	...	3	432	16,212
Tea gardens	.	1	2,000	2,000
Printing Presses	.	1	212	9,964
Tobacco Factories	.	1	1,500	16,500
Ice Factories	..	1	550	41,500
Miscellaneous	..	11	11,071	44,827
<i>Total</i>		132	117,647	799,196

fourth quarter of 1921

Demands					Results						
Pay	Bonus	Personnel	Leave and hours*	Other	Not known	Successful	Partially successful	Unsuccessful	Indefinite	Not known	In progress
1										1	
24	8	7	2	1	1	4	28	2		1	4
9	48	11	1	7	47	9	19			1	2
2	2	2	1	1		1	4			1	
2						2				1	
1	1	1		1			2	1			
	1				1						
40	49	22	1	18	2	49	16	54	2	4	7
6	49	12	1	4		47	9	15			
4	5			1		3	3	1			3
2				2		1	1	1			2
3		1		2			4	1			
		2						2			
17			1					17		1	
			2					2		1	
		2		1				2		1	
1						1					
6								8			
40	49	22	1	18	2	49	16	54	2	4	7

Note on the Periodicity of Famines in India

It is well known that crises occur periodically in Western countries. The time normally occupied by a trade cycle is from seven years to about ten and a half years.

Famines represent crises in an agricultural country—a famine is an agricultural crisis. Famines in India are of frequent occurrence, but do they recur at regular intervals?

In his article on "Commercial Crises and Sun spots" printed in the "*Nature*" of November 14, 1878, and reprinted in "*Investigations in Currency and Finance*", W. Stanley Jevons incidentally discussed the question of periodicity of famines in India. He believed that there was some connection between famines in India and crises in England. He agreed with Mr. J. C. Ollerenshaw that "the secret of good trade in Lancashire is the low price of rice and grain in India." When food is cheap in India, the people have more money to spend on imports from Lancashire; when, as in a time of famine the price of food rises, the people have very little to spend on new clothes, which "produces a marked change

in the demand for Lancashire goods". Jevons tried to show that famines recurred periodically in India at an interval of ten or eleven years. He gives in his article a most interesting list of the price of wheat at Delhi for seventy three years ending with 1853 (reproduced below), on which he based his conclusion that commercial crises occurred in England "in almost perfect coincidence with scarcity at Delhi."

*Price of Wheat at Delhi in Rupees per
1,000 Seers of Wheat.*

1763	50 M. C.	1784	40
1764	35	1785	25
1765	27	1786	23
1766	24	1787	22
1767	23	1788	23
1768	21	1789	24
1769	24	1790	26
1770	28	1791	33
1771	33	1792	81 M.
1772	38 C.	1793	54 C.
1773	100 M. C.	1794	32
1774	53	1795	14
1775	40	1796	14
1776	25	1797	15
1777	17	1798	8
1778	25	1799	17
1779	33	1800	22
1780	45	1801	23
1781	55	1802	25
1782	91	1803	65 M.
1783	167 M. C.	1804	48 C.

1805	33	1821	38
1806	31	1822	35
1807	28	1823	33
1808	36	1824	39
1809	40	1825	39 C.
1810	25 C.	1826	48 M. C.
1811	28	1827	30
1812	44	1828	22
1813	43	1829	21
1814	30	1830	21
1815	23 C.	1831	26
1816	28	1832	22
1817	41	1833	33
1818	39	1834	41 M.
1819	42	1835	25
1820	46	1836	C.

The letter, M indicates the maxima attained by the price, and C. the year of crisis.

The intervals between the years of famine are as shown below —

Famine year	Interval.
1765	
1773	10
1783	10
1792	9
1803	11
1826	23
1834	8

All that the above table shows is that up to 1803 famines occurred at intervals of about ten years. There is no regularity after that year.

The question of the periodicity of famines is

also incidentally discussed in some of the early Punjab Settlement Reports. In the Settlement Report of the Sialkot district (1865), Mr. Prinsep, the Settlement Commissioner, refers to the famines of 1783, 1812, and 1833, and under the heading "Coincidence of their recurrence," remarks:—

"Adding to these the late visitation of 1861, we have within a period of 83 years four famines which, strange to say, have recurred at regular intervals of from 21 to 29 years of each other, and each one of which must have tended to impoverish the country in a greater or less degree." And he added that it was proper to give due weight to this recurrence of famines at regular intervals when fixing a new assessment.

In the Settlement Report of the Rohtak district (1880) Messrs. W. E. Purser and H. C. Fanshaw, the authors of the Report, give a list of famines which visited Rohtak during a period of 124 years, ending 1877-78. The names of famines are given and the popular sayings about them are quoted, from which it may be inferred that the famines actually occurred in the years in which they are stated to have occurred. About the "Satha" famine of *Sambat* 1900, (1804-05 A. D.) it is said that grain sold at 10 seers per rupee, two consecutive harvests having failed. In the next famine called the "Unhattara" prices rose to 7-8 seers per rupee. About the "Nawia" famine of *Sambat* 1890 (1833-34 A. D.) people used to say, "baniya warch gaya kothi main, balak rovo roti main," meaning that the grain-dealer hid in his house, and the child wept

over its meals. The authors of the report do not believe in a ten or eleven year cycle of famines. They say:—

“The famines seem to have occurred irregularly, and to have nothing of a cycle nature about them; eight in the present century give one every ten years on an average; as a fact, two have occurred in each of the second, fourth and seventh decades, and none in the third, fifth and sixth, though the famine of 1860 61 was only just outside the last ”

I have given below in Table II the prices of wheat at Farrukhabad in the United Provinces (114 years), Sialkot (94 years), Ludhiana (57 years), and Rohtak (57 years), and in Table I a list of famines and the interval at which they visited the place mentioned. The information about famines before 1861, where it is not based upon figures of prices, is derived from the Settlement Reports. An unprejudiced examination of the facts would show that we have very little ground for thinking that famines recur at regular intervals. As regards Farrukhabad, the first three famines occurred at intervals of about ten years, but there is an interval of 23 years between the famine of 1838 and the next famine of 1861. Then there are two famines in the seventh decade, two in the eighth, one in the ninth, and two in the last decade of the 19th century. Famines in Sialkot, Ludhiana, and Rohtak were, if possible, even more irregular in their occurrence. On the basis of the evidence before us, it cannot be concluded that famines occur in a cycle of a fixed number of years.

TABLE I

Farrukh- abad		Sialkot		Ludhiana		Rohtak	
Famine years	Interval	Famine years	Interval	Famine years	Interval	Famine years	Interval
1817		1783		1730		1753 54	
1827	10	1812	29	1759*	29	1782 83	29
1838	11	1833	21	1770*	11	1802 03	20
1861	23	1861	2	1783	13	1812 13	10
1866	5	1869	8	1812 13	29	1817 18	5
1869	3	1879	10	1833	21	1833 34	16
1874	5	1887	8	1860 61	27	1837 38	4
1879	5	1892	5	1869 70	9	1860 61	23
1888 90	9	1897	5	1877 78	8	1868 69	8
1897	9	1900	3	1887 88	10	1877 78	9
1900	3	1908	8	1891 92	4	1887 88	10
1907 08	7	1915	7	1897	6	1891 92	4
1915	8			1900	3	1897	6
				1908 09	8	1900	3
				1915	7	1908 09	8
						1915	7

* Drought but apparently no famine

TABLE II.
THE PRICE OF WHEAT
Seers per rupee.

	Farru litated (U P)	Sia kot	Ambala	Rohtak	Ludh anna
1815	45				
1816	47				
1817	15				
1818	23				
1819	20				
1820	21				
1821	40				
1822	43	78			
1823	27	67			
1824	30	59			
1825	41	56			
1826	23	93			
1827	15	106			
1828	32	103			
1829	37	90			
1830	32	99			
1831	34	78			
1832	45	75			
1833	38	77			
1834	27	92			
1835	48	97			
1836	34	89			
1837	30	48			

	Farrukhabad (U.P.)	Sialkot	Amritsar	Robtak	Ludhiana
1838	14	48			
1839	34	47			
1840	29	43			
1841	27	49			
1842	26	83			
1843	35	82			
1844	32	49			
1845	32	46		26	
1846	14	44		25	
1847	36	54		24	
1848	44	64		30	
1849	48	47		25	
1850	4	53		37	
1851	44	92		43	
1852	45	92		35	
1853	34			36	
1854	25			41	
1855	40			51	
1856	34			36	
1857	29			45	
1858	33			45	
1859	31			43	
1860	24			19	
1861	14	19	14	18	16
1862	30	28	29	33	25
1863	33	38	39	20	38
1864	23	35	27	23	34

	Farrukhabad (U.P.)	Sialkot	Amritsar	Rohtak	Ludhiana
1865	1	26	23	19	25
1866	14	21	22	21	25
1867	21	20	23	24	25
1868	21	16	17	16	19
1869	14	12	11	11	13
1870	20	14	20	17	16
1871		22	25	21	26
1872	18	22	21	16	22
1873	17	24	22	21	25
1874	15	21	24	19	26
1875	22	23	24	22	26
1876	28	24	23	24	26
1877	17	22	21	19	25
1878	15	15	17	14	18
1879	14	13	15	14	15
1880	18	15	16	17	18
1881	19	18	19	20	20
1882	18	25	25	19	26
1883	19	25	23	19	24
1884	21	27	23	20	25
1885	21	25	27	24	28
1886	18	18	22	20	22
1887	15	15	16	14	17
1888	14	17	17	15	18
1889	16	20	20	18	22
1890	14	17	18	17	19
1891	16	15	16	15	15

	Farrukhabad (U.P.)	Sialkot	Ambala	Rohtak	Ludhiana
1892	14	13	15	15	15
1893	14	15	18	17	18
1894	16	22	25	20	25
1895	15	18	19	17	20
1896	11	12	13	12	13
1897	10	10	11	10	11
1898	16	16	17	15	17
1899	15	15	17	15	17
1900	12	12	12	11	13
1901	13	15	15	14	16
1902	14	15	17	15	17
1903	17	16	17	15	18
1904	18	17	19	17	19



ERRATA.

Page 257, 15 lines from bottom, *for* 1915,
read, 1920.

Page 273, 11 lines from top, *for* escuds,
read, escudos.

Page 273, 11 lines from top, *for* Lisbon, *read*
Lisbon.

Page 278, 5 lines from top *for* 1919-20 in
the 4th column, *read*, 1920-21,

Page 381, 14 lines from top *for* eliminate,
read, eliminated.

Page 868, 16 lines from top *for* latter, *read*,
later.

Page 476, 12 lines from bottom insert, 'and'
before scientists.

Page 476, 9 lines from bottom insert 'The
prices of' before 'sacks'.

Page 484, last line, *for* Indian *read* British.

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